

Chapter 12

Filing a Successful Patent Application

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[Excerpt from *Entrepreneurs' Guide to Patents, Trademarks, Copyrights Licensing and Trade Secrets* \(Penuguin/Putnam Press 2004\)](#)

No one knows what the true value of a process to clone a cat or a cow may be worth. The ultimate value of a patent often depends on market factors that are impossible to predict. The patent may soar in value or be rendered worthless by competing and complimentary technologies. Its value may even hinge on regulatory issues like FDA approval. Regardless, at the time the application is filed, every inventor has an interest in obtaining a patent having the broadest possible scope.

In This Chapter You Find Out:

- The role of the Patent and Trademark Office
- About hiring attorneys and patent agents to assist with your claims
- The requirements and procedures for filing a patent application
- How to obtain the broadest protection
- What to do if your application is denied

Three barnyard animals have become central figures in a high stakes patent war involving the cloning of animals. Dolly, a sheep, undisputedly the first cloned animal to walk the earth, is owned by a company named Geron. However, another company, Infigen, owner of Gene, a cloned cow, claims to have records and documentation show its use of the cloning technology that produced Gene more that a year prior to Dolly's debut. A third company, Advanced Cell Technology, Inc. (ACT) claims that their George is the real cash cow in the cloning debate, and they hold the patent to prove it.

There's no dispute that ACT won the paper chase, having been awarded patent No. 5,945,577 for the technology that produced George. In European countries, the first to file is the clear winner. If this were the standard in the U.S., ACT's claim would trump. However, the U.S. Patent Act provides that a patent cannot issue if the invention is known, used or published by others prior to the date of invention disclosed on the application.¹ Infigen claims detailed lab records support its claim to first use of the technology.

The U.S. Patent Office has agreed to hear Geron's and Infigen's challenges to the ACT patent. The filing and processing of the patent applications is expected to figure prominently in the case. Geron, owner of Dolly, said its patent application was submitted first, then ignored or overlooked by patent clerks, allowing ACT to win. Infigen also claims that the same patent office, in Arlington Virginia, lost its paperwork.

Currently the three companies involved in this barnyard squabble (ACT, Geron and Infigen) have more than 20 patents pending between them.

At stake are millions, or perhaps even billions, of dollars of anticipated revenue from super-efficient milk producing cow clones and clone-derived pharmaceuticals. Not to mention the huge potential market for cloned pets. Genetic Savings & Clone in College Station in Texas has already reported the first cat clone.²

Although a patent costs thousands of dollars and takes years to procure, it's the most coveted of all intellectual property protections. The *patent prosecution* is the unique

¹ 35 U.S. Sec. 102.

² Raja Mishra, *Firms Fight over Lucrative Patent Rights to Animal Cloning*, NewsFactor Network , February 20, 2002.

legal process which has the sole purpose of determining whether something new and useful has been discovered and a patent should issue.

Players in the Patent Process

A patent prosecution is a rather quirky legal proceeding. It's a unique process where lawyers, engineers, software developers and scientists come together to hash out what knowledge will be taken out of the public domain and granted monopoly status for the duration of a patent term.

The Agency: The Patent and Trademark Office

The prosecution process begins in the U.S. Patent and Trademark Office (PTO). The PTO is the federal agency charged with reviewing patent applications and deciding what patents should be granted. The PTO itself is a division of the Department of Commerce and is headed up by the Commissioner of Patents and Trademarks.

You can find the rules that govern the activities and administration of the PTO in the Code of Federal Regulations, which is a compilation of regulations passed by Congress to add specificity to federal statutes. The PTO web site is located at www.uspto.gov. You can also access the following from the PTO site:

- Forms
- Publications explaining how to complete various forms, and how the PTO operates
- Patent statutes

- Patents issued since 1790
- Patent applications filed since March 15, 2001
- A list of FAQ's about patents and PTO office procedures

The Advocates: Attorneys and Agents

You can prepare your own patent application just as you can prepare your own tax return or handle your own divorce. But the more you feel is at stake financially, the more likely you are to seek the services of a qualified professional. You can hire either a patent attorney or a *patent agent* who is registered to practice before the PTO to assist you in the patent prosecution process.

Patent attorneys are sort of a unique breed. Many of them are engineers as well as attorneys. To practice before the PTO, attorneys must have taken science and technical classes and pass an examination that demonstrates they have sufficient scientific and technical knowledge to understand the inventions.

Patent agents don't have law degrees, but they've met the PTO requirements for scientific and technical training, and have passed a patent examination identical to that taken by patent attorneys. Patent agents are authorized to help you prepare and *prosecute*, or process, patent applications.

<p>Business Tip: Patent agents may be able to offer you a more reasonable hourly rate, but they can't represent you in any litigation or engage in any activities that amount to the practice of law.</p>
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Whether you hire a patent attorney or patent agent, you must file the correct forms to let the PTO know who's representing you and is authorized to correspond with the office during the patent prosecution. If an attorney is representing you, you need to file a *Power of Attorney* form with the Patent and Trademark Office. If you're represented by an agent, you need to file an *Authorization of Agent* form.

The Applicants: Who Can Own a Patent?

Patent rights are a form of personal property that you can sell, license, transfer or leave to someone under your will. The actual inventor isn't always the owner of a patent. A patent application can only be filed by the owner or legal assignee of the technology.

Ownership issues come up in a variety of contexts:

- **Inventions by Employees** - Inventions created in the context of the employer/employee relationship are governed by the *workshop doctrine*. This doctrine presumes that an employer is entitled to claim ownership of any invention created by an employee in the scope of his or her employment. This presumption can be modified by a written agreement. A major area of controversy often centers on whether an employment relationship exists, and whether the workshop doctrine applies. Courts usually apply factors derived from IRS regulations to decide whether there's an employment relationship.
- **Commissioned Inventions and Consulting Agreements** - A commissioned invention is one where an inventor is paid to develop a technology as an independent contractor rather than an employee. Ownership of the patent is governed by the terms of the contract.

- **Joint Ownership of Collaborative Inventions** - The PTO permits applications for joint ownership of a patent. Joint owners often detail their ownership contributions and obligations in a joint ownership agreement.
- **University Sponsored Research** - Most colleges and universities that fund research require faculty to sign agreements assigning ownership of patent rights to the university, and require their faculty members to actively cooperate in the patent prosecution process.
- **Government Contracts** - What happens when an inventor's employee is the government? Or when the government collaborates with private industry to develop new technology? Special federal statutes cover inventions made with government assistance.³ The government can waive some or all of its rights in such inventions.
- **Assigned and Licensed Inventions** - It's not uncommon for an inventor to lack the capital to bring his idea to market. Inventors may enter into agreements to assign total ownership or license some of their patent rights to manufacturers or other third parties. (See Chapter 15, *Getting Your Idea to Market: Licensing and Other Arrangements*.)

Conducting a Thorough Search for Prior Inventions

If you're convinced you've discovered something novel, you need to see if anyone else may have entertained similar thoughts. The patent application process begins with a *prior arts* search of previously existing technology and inventions.

³ 35 U.S.C. Sec. 200-11 et seq.

Although you may undertake a search of PTO records on your own, if you feel something is truly at stake, you may feel economically justified in hiring a certified patent attorney or agent who in turn may hire a professional search firm to undertake the search of previous patents. The attorney or agent initially acts as sort of a paid skeptic, attempting to identify all of the objections, issues and arguments that may be raised by the PTO in the course of reviewing your patent.

Professional Patent Researchers

Your attorney or agent generally doesn't obtain documents directly from the patent office, but probably hires a professional research company to undertake a *novelty search*. The professional researcher is usually familiar with the area of technology for which your patent is sought, and combs through all of the patent office records for potentially relevant documents.

Once the patent attorney has located a researcher with the necessary technical expertise in the specific field, it's up to the attorney to formulate a well-defined request. The request should include a thorough description of the invention, a diagram or picture of the invention and information about any known patents. This information is usually provided to the researcher in the form of a letter, which includes the request to undertake the search.

The researcher ultimately provides your attorney with the results of his or her search which includes copies of the patent applications for similar or closely related inventions initially by comparing the *abstracts* contained within the patents. The abstract

is a summary description of an invention. Figure 12-1 contains a sample abstract for a yo-yo.

<hr/>	
United States Patent	6,468,125
<hr/>	
Nelson	October 22, 2002
<hr/>	
<i>Yo-yo</i> structure	
Abstract	
A <i>yo-yo</i> structure utilizing a pair of disks connected by a spindle. The disks form a groove to confine a line connected to the spindle. A cover of soft flexible material fits over at least one of the disks. A shield is fixed in the vicinity of the groove between the disks to prevent portions of the cover from entering the groove when the <i>yo-yo</i> is operating.	

Figure 12-1 Portion of patent for yo-yo containing abstract

At the conclusion of the search process your attorney can advise you whether or not it appears to be advantageous to pursue the patent, taking into account the legal requirements for the particular type of patent. Utility patents, for example, must be useful, novel and non-obvious when viewed in the context of prior art or existing technology.

If your attorney concludes the invention is too obvious to patent or amounts to a modification of a pre-existing invention, he or she will probably advise you not to invest further time and money pursuing the patent. If, on the other hand, the attorney concludes

that the invention is sufficiently novel to pass muster in the patent office, you can decide where to go from there.

Tips for Conducting Your Own Preliminary Search on the Internet

You can get a lot of preliminary information on your own off the Patent and Trademark Web site located at www.uspto.gov.

The Web site allows you to search key terms and download relevant patents from the several decades. The problem with the key word search approach is that you generally end up with a large number of irrelevant or marginally related patents to sift through. For faster searching the PTO Web site contains an abbreviated database containing only the text of each patent, without drawings.

The PTO Web site provides free access to all patents filed since 1790, and for pending applications filed subsequent to March 15, 2001. (For patents prior to 1976, you can only search by patent number and not by key word.)

To search for related patents using a key term (such as “yo-yo”):

1. Go to the PTO web page, located at www.uspto.gov.
2. Click the Patents button. Several options appear on the screen that follows. Click the “Search Patents” hypertext link on the upper left hand side. A screen appears offering you the Options of searching for Issued Patents or Patent Applications.
3. Click the link for either the Issued Patents or the Patent Applications database.

4. Click the Quick Search link, and enter your search term as shown in **Figure 12-1**.
5. The Web page shown in **Figure 12-2** appears.

Patent Full-Text and Full-Page Image Databases

Issued Patents <small>(full-text since 1976, full-page images since 1790)</small>	Patent Applications <small>(published since 15 March 2001)</small>
<ul style="list-style-type: none"> Quick Search Advanced Search Patent Number Search Database Notices and Status Database Contents Help 	<ul style="list-style-type: none"> Quick Search Advanced Search Publication Number Search Help
<p>Important Notices!</p> <p>How to Access Full-Page Images</p> <p>Problems Accessing the Databases?</p> <p>Report Data Content Problems</p> <p>Tools to Help in Searching by Patent Classification</p> <p>Downloadable Published Sequence Listings</p>	

Figure 12-1: This page allows to search existing patents and pending applications.

USPTO PATENT FULL-TEXT AND IMAGE DATABASE



Data current through 01/14/2003

Query [\[Help\]](#)

Term 1: in Field 1:

Term 2: in Field 2:

Select years [\[Help\]](#)

Patents from 1790 through 1975 are searchable only by Patent Number and Current US Classification!

Figure 12-2: Enter patent search terms using this Web page

If you want to perform a preliminary Internet search including older patents or foreign patents, you can do so using one of the following fee based search services:

- **Corporate Intelligence Corporation (www.1790.com)** - Contains copies of patents dating back to 1790.
- **Micropatent (www.micropatent.com)** - Contains U.S. Japanese, European and other foreign patents. U.S. and Japanese patents date back to 1976. European patents from 1988 and thereafter are available.
- **LexPat (www.lexis-nexis.com)** - This fee-based service offers the capability to search technical journals and magazines (as well as U.S. patents from 1976). This database is especially useful for undertaking prior art searches.

Filing the Patent Application

Filing a patent application is a tough job for an amateur. It requires a skillful drafting style and a precise understanding of the technology involved. The disclosures and representations made in the application and the clarity with which they're made determine the success and scope of the patent.

Information Specified in the Application

The *specification* is the main part of the patent application. In the specification, you're required to adequately describe your invention so that an individual "skilled in the art" can, upon reading the patent, make a working version of the invention without further experimentation.

The specification has to explain your invention in terms of the *best mode*. The best mode is the most efficient and effective method for implementing the invention. You may know of several alternative ways to create or produce the invention; you're not required to disclose all these alternative methods. However, if you fail to disclose the *best mode* to carry out the invention in the application, this can invalidate your patent rights.

The specification portion of your application must include the following:

- **Title** - The title describes the subject matter of the patent. Examples of titles of patent applications are "High Performance Yo-Yo" and "Circular Flying Disk Toy."⁴

⁴ Patent No. **6,468,125** (yo yo) and Patent No. **6,322,419** (disk toy).

- **Abstract** - The abstract is a summary of the invention. It's usually a few paragraphs long, and explains the function of the invention and the technology used to effectuate it in very general terms.
- **Cross-References** - Sometimes more than one inventor will file a patent for the same invention. If you're aware of prior application pending on the same or a similar invention, you must disclose the date and serial number of the application. If you subsequently receive the patent, you may get the benefit of the filing date of the prior application.
- **Background and Summary of the Invention** - The background section is an analysis of the prior art, and explains the need, or usefulness, of the invention.
- **Detailed Description of How Invention Works** - The detailed description requires technical expertise, and must be sufficiently specific to allow an individual familiar with the prior art to recreate the invention without research beyond the description provided.
- **Drawings of the Invention and Descriptions of the Views Contained in the Drawings** - Drawings are necessary only to the extent that they're required to convey how the invention works. Drawings not required, but are customarily submitted with virtually all applications and may include blue prints, three dimensional computerized representations, sketches and flow charts.
- **Claims** - Claims are the crux of the patent applications. It's been said that they define the scope of a patent in the same way that the legal description contained in a deed describe the owner's interest in the real property.

Some Claim Drafting Considerations

Claims are the most critical part of your application. They are the portion of your application that defines the scope of your patent rights. Once your patent is issued, you must live with the language of what you've actually claimed, and not what in hindsight you wish you might have said.

The Markman Decision

In 1996, a dry cleaner named Herbert Markman brought an infringement suit that forever changed how patent claims would be interpreted in the U.S. Mr. Markman sued Westview Instruments for allegedly infringing his patent for a computerized system for managing clothing in a dry-cleaning establishment. The patent claimed a method of "maintain[ing] an inventory total" and "detect[ing] and localiz[ing] spurious additions to inventory."⁵

Mr. Markman alleged that Westview Instruments infringed his patent by the way it kept track of invoices and accounts receivable; these, he said, were "inventory" within the scope of his claims.

The jury agreed with Mr. Markman and found infringement. The trial judge overruled the jury, saying that "inventory" meant clothing being cleaned, not invoices and accounts receivable.

⁵ *Markman et al. v. Westview Instruments, Inc., et al.* (95-26), 517 US 370 (1996).

In upholding the *Markman* decision, the Supreme Court ruled that the interpretation of patent claims is the duty of the trial judge, not the jury. Federal courts across the country now routinely hold so-called “Markman hearings” prior to trial, before a judge and out of ear shot of the jury, to determine how juries should be instructed to interpret patent claims.

Keeping Control of Claim Language by Defining Your Terms

As an inventor, you are free to use claim language of your own choosing, and to define the terms describing your invention and the scope of your patent as you please, so long as you clearly set out your definitions within your application.

In interpreting your claim language, a court will first look to see if you have defined the disputed term in the specification of your patent application. If the court finds you’ve done a good job of this, it will usually look no further. If you don’t define a term, and the patent becomes subject to an infringement action, a court will set about the task of determining its “ordinary meaning.”

How Courts Construe “Ordinary Meaning”

A court is allowed to consult dictionaries, treatises, professional publications and even listen to expert testimony to determine the “ordinary” meaning of the terms you’ve included in your claims. The legal standard for ordinary meaning is the meaning that would be understood by "persons of ordinary skill in the art." ⁶

⁶ Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367 (Fed. Cir. 1986).

The U.S. Court of Appeals for the Federal Circuit has held that, for purposes of determining infringement, when a word in a claim can be given either of two meanings, the narrower meaning will be used, because that serves the purpose of giving fair notice to competitors. In other words, the benefit of the doubt goes to the accused infringer. Courts take the view that the patent owner could and should have been more specific about what he or she intended to claim.

The Supreme Court has stated:

"Were we to allow [*the patent owner*] successfully to assert the broader of the two senses of [*the claim language in question*], we would undermine the fair notice function of the requirement that the patentee distinctly claim the subject matter disclosed in the patent from which he can exclude others temporarily.

"Where there is an equal choice between a broader and a narrower meaning of a claim, and there is an enabling disclosure that indicates that the applicant is at least entitled to a claim having the narrower meaning, we consider the notice function of the claim to be best served by adopting the narrower meaning."⁷

You Must Disclose Information That Works Against You

Being able to explain your own invention is not enough. You also have a duty, in your application, to disclose information about other people's inventions and provide copies of patents and publications that may impact on your claims. In particular, your application must disclose information that may be adverse to the positions you take and

⁷ Warner-Jenkinson Co. v. Hilton Davis Chemical . Co., 520 U.S. 17 (1997).

the arguments you make in your application. You have a specific duty to inform the PTO about the prior art, related foreign and domestic patents and related litigation.

Inventors must file an *Information Disclosure Statement*, or IDS form, within three months of the date of the filing of the application. The duty to disclose information in the IDS form pertains to all *material* information. Material information is defined as:

- Information that tends to refute or establish a claim or element of a claim.
- Information that refutes or may be inconsistent with any position that an you take in your application.

The IDS form must also include a listing of patents and publications relevant to the invention. Copies of the relevant patents and publications are required to be attached. If these documents aren't in English, your may be required to provide a translation with your application.

Other Legally Required Paperwork

In addition to describing your invention, your application must be accompanied by certain legal housekeeping forms. These documents include the following:

- **Oath or declaration** - This is a signed statement attesting to the identity of the inventors and their belief as to the truthfulness of all of the representations contained in the application. The declaration also requires you to identify any prior U.S. or foreign applications in which the invention is disclosed. The PTO provides a specific Declaration Form that includes all of the legally required information.
- **Power of Attorney or Authorization of Agent** - Only the inventor, or his agent or attorney certified by the PTO can prosecute a patent application.

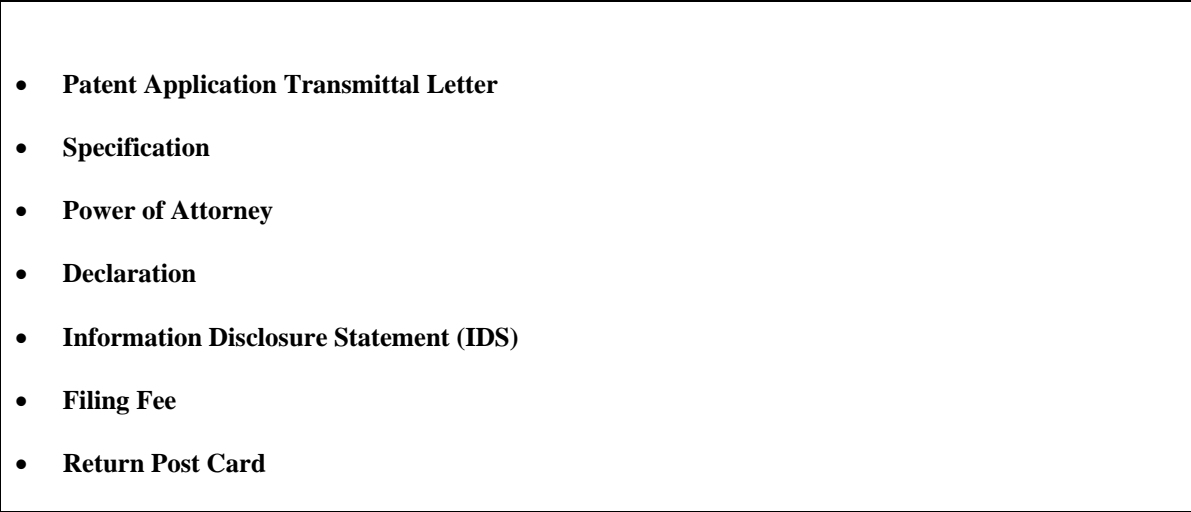
These forms let the PTO know who's representing you, and should get copies of correspondence. The PTO cannot communicate with your agent or attorney unless this form is on file.

- **Certificate of Mailing** - A certificate of mailing is a separate statement certifying the date on which the patent application is being mailed, and may be signed by anyone.
- **Transmittal Form** - A transmittal form lists all of the documents being submitted and the total number of pages. It must also include the name of the inventor and title of the invention.
- **Self Addressed Return Card** - An applicant should enclose a self-addressed post card for the PTO to verify receipt of the application and accompanying materials.

A checklist of the materials that should be included in a patent application appears in

Figure 12-3.

Figure 12-3: Patent Application Checklist

- 
- **Patent Application Transmittal Letter**
 - **Specification**
 - **Power of Attorney**
 - **Declaration**
 - **Information Disclosure Statement (IDS)**
 - **Filing Fee**
 - **Return Post Card**

Some Special Types of Patent Applications

Inventions and inventors themselves sometimes defy the rigors of classification imposed by the standard patent application. The PTO offers some specialized types of forms to accommodate various issues that can arise with respect to a particular invention.

Saving Some Money: Filing an Abbreviated Application

If you find yourself short of time or money, but want to protect your idea ASAP, consider filing an abbreviated provisional application. You can file a Provisional Patent Application (PPA), which allows you to establish an immediate filing date for your patent. The PPA allows the applicant to claim “patent pending” status for the invention, just as you would be able to do with the regular application.

The PPA is a sort of abbreviated interim document. If the regular patent application is filed within one year, the date of the filing PPA, rather than the full application, governs.

The PPA must include a description of the invention and must clearly explain how to make and use the invention. Like the regular application, the PPA must describe the best mode for recreating the invention. The PPA requires less detail than the full application, but must clearly explain how to make and use the invention. Diagrams and other supporting documentation are optional.

There are several advantages to the PPA process, in addition to the expedited filing date and the ability to claim patent pending status:

1. The PPA is less costly to prepare and file than the regular application.
2. The PPA is required to describe the invention with less specificity, which means less research and testing prior to filing.
3. The complicated IDS form (described in the previous section) need not accompany the PPA.
4. The PPA ultimately extends the duration of the patent by as much as one year, the expiration of which is 20 years from the date of the filing of the regular patent application.

The disadvantage of the PPA process is that it can be rather inflexible. If the inventor doesn't file an application within one year, the PPA is abandoned and becomes worthless. If the invention is changed during the time between the PPA filing and the filing of the regular application, the PPA also becomes worthless.

Adding New Information: Continuation Applications

Continuation applications are a special type of form that allow you to add new information to support your claims, or pertaining to improvements in your invention discovered while the application is pending.

Divisional Applications: Separating Multiple Inventions

Only one invention is allowed per application. If a patent examiner determines that your application contains two or more inventions, he or she may require you to split

up your claims and put them into two or more separate applications. You can file one or more *Divisional Applications, in addition to your original patent application*, to delineate the claims pertaining to each separate invention. Divisional applications allow you to preserve your original filing date, which means you still get priority over inventors that file after you filed your initial application.

Reissue Patents

Suppose you're successful in getting a patent for your invention, but you realize that there were errors in your application that impact on the scope of your patent. You can attempt to fix your patent by filing a *Reissue Patent*.

The Reissue Patent is an error correction procedure. For example, if your specifications or drawings were incorrect, you can opt for this procedure.

Reissue patents usually have the effect of narrowing or broadening claims in the existing patent. If your reissue patent would have the effect for broadening your claims, it must be filed within two years of the issue date of the original patent. The expiration date for the Reissue Patent is the same as for the original patent.

Small Entity Declaration Form

The PTO gives a price break to certain types of entities. If you're filing on behalf of one of the following, you qualify for a reduced fee:

- Non-profit organizations as defined in the Code of Federal Regulations.

- Small businesses with 500 or fewer employees.
- An independent inventor, i.e., an individual or small business.

Prosecuting Your Patent Application

After an application is filed, it takes anywhere from approximately eighteen months to three years for the PTO to process your application. During the prosecution process, the PTO issues two different types of official determinations called *office actions*.

First Office Action: Required Changes and Amendments

Almost no one gets it right the first time around. The first office action communicated to you by the PTO usually requires additional clarification, documentation or amendments to claims. If the examiner determines some of the claims are too broad, or aren't justified the PTO may require you to eliminate or narrow some of them. The initial office action may require additional research.

You're given three months to respond to an office action. All amendments, modifications and additional materials have to be submitted during this period.

You're not permitted to submit *new matter* in the course of altering, amending or supplementing your application. New matter is the subject of considerable controversy, but the general rule is that it consists of anything that doesn't conform to or support the initial application.

Final Rejection or Office Action: Notice of Allowance and Disallowance

Usually, but not always, the second action taken by the PTO is labeled “final.” If the PTO approves your application, it issues a Notice of Allowance. After you receive a Notice of Allowance you need to pay a fee known as the issue fee. Once the issue fee has been paid, your patent certificate will be issued. Excerpts from your patent appear in the *Weekly Gazette*. The *Weekly Gazette* is a publication available in most U.S. libraries and on the PTO Website (www.uspto.gov) that’s issued every Tuesday and summarizes patents and certain actions related to patents every week. (It also publishes patents that have expired due to pay required maintenance fees, and patents that are reinstated after their owners pay a late maintenance fee.)

If the amendments you’ve made to the application don’t satisfy the PTO, the second office action may be a denial, or *Notice of Disallowance*. However, a final rejection may not truly be final. The applicant has several options, as discussed in the next section of this Chapter.

Using the “Patent Pending” Designation for Your Invention

During the pendency period, between the filing and granting of a patent, you’re allowed to use the coveted “Patent Pending” designation on materials pertaining to your invention. This notice informs the public you’re applying for a patent. Of course, the public may or may not understand that there’s no enforcement capability behind this designation until you actually acquire a patent.

Caution: You may be subject to special civil penalties if you use the Patent Pending designation when you don't actually have an application pending.

Effective December 2002, patent applications actually entitled to some retroactive protection for infringements that occur during the pendency period. Subsequent to 1999, applicants were required to publish notice of their pending application within 18 months after the first filing date. You can later use the publication to prove an infringer had actual notice of your pending application and of their own infringement.

Oddly, pending applications are published to provide notice to the public, not to facilitate commentary. The public isn't allowed to protest a pending application without the applicant's consent (highly unlikely!).

Business Tip: You can avoid the requirement to publish an application by filing a statement that the patent application will not be "published abroad." If you change your mind and decide to publish abroad, you need to give notice to the PTO within 45 days.

Application Deadlines and Extensions

You generally have three months to respond to any *substantive* office action by the PTO, such as a Notice of Disallowance. If the action is for some non-substantive matter, such as an administrative issue or clarification of the spelling of someone's name, you're generally given only one month.

If you fail to respond or act within the deadline specified in the office action letter, your application technically becomes *abandoned*. Abandonment, if not cured, is tantamount to a dismissal or denial of your application.

Not to worry, though; if you miss a deadline you can revive your application by buying an extension, or filing a petition to revive.

Buying an Extension

You can literally buy an extension if you miss a deadline to any office action. If you don't send in your reply within the time period designated by the office action letter, you can obtain an extension to send in your reply up to six months after the office action expires if you pay the prices shown in a special Fee Schedule published by the PTO and filing a form called Petition for Extension of Time along with a Certificate of Mailing.

Caution: In computing the six month maximum period during which you can file a response to an office action, compute it from the date you received the original office action letter, not from the date of expiration. For example, if you received a letter dated February 10, for which the time to reply expired March 10, the maximum time for which you can obtain an extension should be computed 6 months from the February 10 date.

Filing a Petition to Revive

There are two reasons that entitle you to file a petition to revive your patent applications within two years from the date of abandonment. The first is that the delay was unavoidable. Unavoidable delays include things like a death or a severe illness. You

must specially petition the Patent and Trademark Office and provide documentation of these extraordinary events.

But what if you simply dropped the ball? It happens. Fortunately, the second is that the delay was avoidable but unintentional. That covers just about every situation, doesn't it?

Along with the appropriate fee, you need to file three documents to revive your petition:

- The reply to the office action that you were otherwise required to file.
- The Petition to Revive form.
- A declaration statement explaining the reasons for an unavoidable delay, or if the delay was avoidable, stating that it was unintentional.

What to Do If Your Application is Rejected

A *Notice of Disallowance* isn't a happy event, but it's also not a kiss of death. Patent Office Rules spell out so many ways to reverse a "final" action, the term hardly seems to apply.

Overview: What do the PTO Rules Say?

Patent Office Rule Number 113 (the numbering has nothing to do with superstition), dealing with "Final Rejection or Action" provides: "On the second or

subsequent examination or consideration, the rejection or other action may be made final, whereupon applicant's response is limited to appeal in the case, or rejection of any claim... or to amendment as specified in Rule 116."

In turn, Rule 116 provides: "After final rejection or action (Rule 113) amendments may be made canceling claims or complying with any requirement... and amendments presenting rejected claims in better form for consideration on appeal may be admitted."

Accordingly, a final action is not fatal to your application. You must, however, take one of the following actions in response to the denial:

1. Narrow or eliminate claims in response to the grounds for rejection cited by the examiner.
2. Request that the Patent Examiner reconsider his grounds for denial (i.e., argue with him or her).
3. Appeal to the Board of Appeals Patent Interference's (BAPI).
4. Petition the PTO Commissioner (for certain types of matters that don't relate to patentability).
5. File a continuation application.
6. Abandon the Application.

Amending and Narrowing Your Claims

A Notice of Disallowance is usually a disappointment, but not a complete shock. Most likely you've gotten a sense of which claims are causing the problems from the initial Office Action. If amendments or changes made in response to a first office action don't cure the problem in the eyes of the examiner, the dreaded Notice of Disallowance may issue as a second action. Amendments filed after a Notice of Disallowance or other final action by the PTO are referred to as *after-final* amendments.

Requirements for Filing Amendments *After* Disallowance

After a Notice of Disallowance, you have three months to bring the application into *condition for allowance status*.

Patent Office Rules provide, technically, that generally, after the first office action amendments aren't permitted without a showing of good reasons as to why they weren't permitted earlier. Fortunately, showing that the amendments would be sufficient to get your claims allowed is considered a good reason.

Tips for Filing Successful Amendments After a Disallowance

Patent Office Rules are intended to ensure that you'll know precisely what aspects of your claim displeased the Patent Examiner. Rule 113 requires: "[i]n making a final

rejection, the examiner shall repeat or state all grounds for rejection then considered applicable to the claims in the case, clearly stating the reasons therefore.”

A careful reading of the Notice of Disallowance should give you some clues as to how to proceed in amending your claims, and even whether it looks as though it will be possible to do so. Sometimes it’s not possible to respond by amending and narrowing your claims without giving up so much of the protection you’re seeking that it that it doesn’t make sense to go this route.

The process of narrowing and amending your claims involves three analytical steps:

1. **Make sure you understand the examiner’s reasons for issuing the Notice of Disallowance.** If the examiner’s rationale is not fully clear to you, you may correspond with the office through your agent or attorney to elicit further information. Be sure that any amendments or changes to your claims are responsive and specific to the examiner’s concerns.
2. **Decide Whether It’s Advantageous to Amend or Narrow the Claims to the Extent Required** - You may feel the examiner is requesting that you give up so much of your claims that patent, even if awarded, would provide dubious protection. You must decide whether the examiner is justified in his or her concerns. Even if you’re not in total agreement, it may be expedient to make the requested amendments if the amended patent would still afford you sufficient protection.
3. **Make the Necessary Amendments to Your Application** - If you decide to amend rather than narrow or eliminate problematic claims, you can only do so

to the extent the amendment doesn't require new matter, which is any information that materially alters your initial application.

Caution: If you decide to amend your claims following a Notice of Disallowance, be sure to file the actual amendments within the three month deadline, plus any extensions you've bought. You cannot file an after-final amendment for an application that's technically been abandoned.

Persuading the Patent Examiner

You certainly don't want to antagonize a patent examiner, but there are times when it's appropriate to advance a polite argument. Patent examiners are, after all, only human and subject to fallibility such as technical oversights just like the rest of us.

If you feel the examiner has overlooked a point of law or a technical nuance that differentiates the functioning of your invention from prior art, the process allows you to point this out. Your agent or attorney is free to communicate your arguments in writing by phone or in person. If you go this route, be sure to do so at the earliest opportunity, so that you can appeal within the required three month time frame if your attempts at persuasion are unsuccessful.

Tip: Personal face-to-face meetings or telephone may work better than written communication, since they provide the opportunity for immediate feedback and clarification, which is helpful to the persuasive process. Also, some communication experts believe it's harder to say "no" to someone in person.

Appealing a Notice of Disallowance

If you don't think an amendment or narrowing of your claims is justified, you can take the position that the patent examiner is flat out wrong by appealing his or her disallowance. The PTO has a special staff of judges to handle appeals, known as the Board of Appeals and Patent Interferences (BAPI).

<p>Lawyer's Note: Appeals to the Board of Appeals and Patent Interferences (BAPI) have about a 35% success rate.</p>

To initiate the appeal process you must file a *Notice of Appeal* stating it's your intent to file an appeal of the disallowance by the patent examiner. The Notice must be accompanied by the filing fee and a *Certificate of Mailing* stating the date the document is mailed, and what is included with it.

You don't need to state your arguments for the appeal in the notice, but you're required to file a brief detailing your position within two months of the time you file your Notice of Appeal.

The patent examiner must file a responsive brief answering all the arguments in your brief. Sometimes, in the course of doing so, the examiner changes his or her mind and the matter is resolved. However it's more likely that the examiner will stand firm and file a document called the *Examiner's Answer*. You're entitled to file a reply (in the form of a legal brief) to the Examiner's answer.

The matter may then be set for *oral argument*, during which you'll have twenty minutes to present your case. The examiner has 15 minutes to present his or her case.

If you're successful in persuading BAPI, it will issue instructions to the examiner to allow your patent, or instructions to take other action. If BAPI agrees with the examiner, as it does about 65% of the time, it will issue a written decision explaining why it believes your invention to be unpatentable.

You can appeal an adverse decision by BAPI with 60 days to the Court of Appeals to the Federal Circuit (CAFC). The CAFC has its home base in Washington DC, but it's a sort of traveling court. It sits and hears cases locally at various locations throughout the year. If the CAFC rules against you as well, you can appeal to the U.S. Supreme Court, although the odds are very slim the Court will agree to hear the case. This means, as a practical matter, the CAFC is pretty much your last hope as far as the court system goes.

***Petitioning the PTO Commissioner
on Non-Substantive Matters***

Sometimes your controversy with a patent examiner doesn't relate to the patentability of your invention. Perhaps the examiner has refused to enter an amendment because he or she feels it constitutes new matter. Or maybe there's an argument over time periods or filing dates, or as to whether you've submitted all required documentation. These matters are considered non-substantive, and can be appealed directly to the Commissioner of Patents and Trademarks.

<p>Lawyer's Note: The Commissioner of Patents and Trademarks has the authority to overrule any patent examiner, but cannot overrule BAPI.</p>
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Although there are no specific deadlines for appealing an action to the Commissioner of Patents and Trademarks, you're advised to do ASAP after you become aware of the issue. There is a fee for this appeal process and you must file a notarized statement explaining the matter you're appealing.

Filing a Continuation or Continuation in Part

Application

A Continuation Application, is a way to continue arguing with the examminer after a final Notice of Disallowance. It contains further evidence in support of the disallowed claims. It cannot include any new matter, but may involve entirely new arguments or claims. The full Continuation Application, because it contains no new matter, has the same filing date as the original application. (Maintaining the original filing date is an advantage in case you need to argue that you have legal priority over someone who later tries to obtain a patent or infringe yours.)

But what do you do if you need to amend a claim to comply with an office action, but realize you can't effectively do so *without* introducing new matter? As you recall, new matter is information that materially alters your initial application. It's not allowed as part of a standard amendment in response to an office action.

The *Continuation In Part Application* procedure solves this dilemma. A Continuation In Part Application is a second application filed for the same invention while the initial application is still pending, and includes new matter to correct an error, add previously omitted information or disclose an improvement. You can also file a

Continuation In Part Application if you discover an improved method or process for carrying out your invention. For example, you might want to substitute a more effective ingredient in a chemical compound, or simplify the implementation of a computer program.

The rules governing the filing date for a Continuation in Part Application can be confusing, since there are actually two pertinent filing dates. This dual filing date concept works to your advantage. The filing date for the Continuation in Part Application is the same as the filing date for the initial application, except for any new matter covered. You don't lose any priority with respect to subsequent applications filed by other inventors for material covered in the original application.

<p>Caution: Both the Continuation in Part and Continuation Application must be filed before the date on which original application is considered abandoned.</p>
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Abandoning Your Patent Application

Sometimes it's best not to go down with the ship. Despite your best efforts to research the prior art and carefully draft and support your claims, fatal issues may arise in the course of prosecution.

Abandonment occurs when you simply stop prosecuting your patent. Doing so forecloses your right to file any type of Continuation Application as well as many of your appeal rights, and consequently you cannot later claim that the filing date of the original

application date applies. If you decide you want to refile in the future, you'll have to file a new application with an entirely new filing date. This means you won't have priority over competing patent applications filed prior to the new application.

Surviving the Dreaded Patent Interference Process

As if prosecuting your patent and persuading the examiner to issue it weren't tough enough, the Patent Rules allow for a special process called a Patent Interference. This process allows the Commissioner of the PTO to quite literally interfere in the prosecution of your patent when he or she finds that an existing application would:

- Interfere with an already pending patent application; or
- Interfere with an unexpired patent that's previously been granted.

A patent interference is an adversarial process in which you have about a one percent chance of becoming embroiled -- that's about how often the Commissioner elects to interfere. It's expensive and time consuming, and is most often used to resolve issues involving the priority of a patent.

The adversaries in this process are referred to as the *junior* and *senior parties*. The senior party is the applicant who filed first. The junior party has the burden of proving one of the following:

- That the junior party reduced the invention to practice before the filing date of the senior party; or

The junior party both conceived of the invention and reasonably attempted to reduce it to practice before the date of filing of the senior patent. Care and Maintenance of Your Patent

Once you've prevailed in the patent prosecution process, you can frame your new patent certificate and hang it on your wall. However, it will become a meaningless piece of paper if you forget to pay the periodic fees required to maintain it.

At the time your patent is granted, you're required to pay an initial issuance fee that covers your registration costs for four years. Subsequently, you're required to pay fees on the 8th and 12th anniversary of issuance.

A patent can be forfeited (abandoned) for failure to pay the requisite maintenance fees. You can petition to revive a forfeited patent on the basis that the delay was unavoidable. But it's a lot easier to mark your calendar for the due dates.

<p>Business Tip: Certain small entities and non-profit organizations are eligible for waivers of the maintenance fees.</p>

How Your Patent Rights Can Be Forfeited

Getting a patent is a big step toward protecting your product, but it is no guarantee of perpetual protection. The PTO can retroactively invalidate a previously granted patent for any of the following reasons:

- **Newly Discovered Prior Art** - The PTO subsequently discovers relevant prior art that wasn't disclosed or discovered during the examination process.

- **Public Use or Sale** - If the PTO is alerted to transactions which evidence that you offered the invention for public sale prior to the date of the application.
- **Misuse** - If you used your patent for improper purposes, such as to accomplish anti-trust violations, the PTO may step in and invalidate it.
- **Fraud** - Obviously, you have an obligation to be truthful to the patent examiner and in all aspects of the patent prosecution process. Evidence of misrepresentation or concealment of facts can result in invalidation of your patent.

Additional Notes About Design Patent Applications

Although the process for obtaining design patents pretty much follows the procedures outlined in this Chapter, there are some specific aspects of the design patent process that are worth noting.

Only one claim is permitted in a design patent application. The specification portion of the application is generally simpler and less technical. However, the drawings and specifications submitted with your application take on much greater importance.

Usually, amendments are simpler and more straightforward in the design patent process. Also, there are no maintenance fees charged for design patents.