

Patent Practice Guide

David J. Stein, Esq.

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INTRODUCTION

This guide has been compiled as a review of the principles and practice of patent prosecution. The outline was made in preparation for completion of the Patent and Trademark Office registration exam.

The outline is in five parts:

- Part I: Patent Applications. This section describes the kinds of applications for patent that may be filed with the PTO, and the contents (mandatory and optional) of each application.
- Part II: Patent Prosecution. This section summarizes the procedures for prosecuting and obtaining a patent from the PTO.
- Part III: Patent Practices. This section describes the practices relating to patents that have been issued by the PTO, including maintenance and correction.
- Part IV: PTO Rules. This section explains the various rules of practice established by the PTO.
- Part V: Appendix. This section presents reference materials, such as fee amounts, a reference for 35 USC 102 and 35 USC 103 rejections, and foreign country information.

A few conventions have been used throughout this guide:

When a list includes a set of requirements, *all* of which must be present or fulfilled, the items in the list are numbered.

When a list includes a set of options, *any one* of which may be performed or present, the items in the list are lettered.

When a list contains any other kind of list, especially an open-ended list describing items that fall within a category, the items in the list are bulleted.

The term “representative” is used to mean an attorney or agent. In one section, this usage is confusing when also discussing a legal representative of an incompetent person, such as a legal guardian or executor of a deceased inventor’s will. In that section, the term “legal representative” will be used for the guardian or executor, and “representative” will continue to be used to mean attorney or agent.

The term “owner” is used to mean anyone having a legal ownership interest in the patent. If a patent has not been assigned, every applicant receives an equal “share” in the ownership of the patent when it issues. Shares may be transferred to an assignee.

PART I: PATENT APPLICATIONS

An application may be made for three kinds of inventions:

- A utility, which is a process, machine, manufacture, or composition of matter, or any improvement (including any combination) of such things.
- A plant.
- A design.

Types of Utility Applications

Provisional Application

A provisional application is a preliminary type of application.

A provisional application is filed to secure a date of filing while work on the invention continues. A provisional application is filed by providing a specification and drawing (no claim required) with a cover sheet, or by requesting the conversion of a nonprovisional application to a provisional application during its pendency (i.e., before the application is abandoned, the issue fee is paid, a request for an SIR is filed, or 12 months have elapsed from the filing date of the application.) Design patent applications can't be provisional or converted to provisional applications.

A provisional application is automatically becomes abandoned 12 months after filing (no non-business day extension) and cannot be extended or revived. A provisional application is not examined and cannot be amended. Design applications can't benefit from an earlier filed provisional application.

Nonprovisional Application

A nonprovisional application is a regular patent application.

A nonprovisional application is considered filed when a specification including at least one claim and any necessary drawings are filed. No new matter can be introduced after an application is filed. An oath and fee are required, but may be provided later (but must be provided within time period set by examiner, or else application is abandoned.)

An application with multiple claims may draw a restriction requirement from an examiner, requiring the applicant to elect one subset of claims for this application. The applicant can pursue the remaining claims as a divisional application.

Continuing Application

A continuing application can be a continuation, continuation-in-part, or divisional application.

A continuing application claims subject matter disclosed in a parent nonprovisional application. A divisional application claims part of the subject matter of the previous

application and no new subject matter. A continuation-in-part (CIP) application contains some old subject matter and some new subject matter.

A continuing application benefits from the filing date of the parent application if at least one common inventor exists between the parent and the continuing application. A CIP only benefits with regard to the old subject matter. The filing of a continuing application does not abandon the parent application.

A continuing application must be filed during the pendency of the parent application (must be filed before abandonment, payment of the issue fee, or the date an appellate court delivers to the PTO an opinion affirming examiner's final rejection of all claims.) The parent application must have been complete – no fatal deficiency in the specification, etc. The applicant can petition for an extension of time in the parent application to keep it from being abandoned before a continuing application is filed.

The filing of a continuing application requires a copy or redraft of the specification. The old specification can be “hereby incorporated herein by reference” into the new specification. The first sentence of a continuing application must refer to the parent application and, if the parent isn't a CPA, all applications on which the parent relied for benefit of a filing date (the entire chain of priority.) A new oath/declaration by all inventors is required for a CIP or if an inventor is being added; otherwise, it's OK to file a copy of the oath/declaration from the parent application and a list of any inventors to be deleted. If, in the parent application, the oath was signed on behalf of an unavailable or uncooperative inventor, a copy of the notice granting the petition should be included.

If the legal representation or correspondence address has changed from a parent application, it should be noted in the continuing application.

The following matters carry over into parent applications as stated:

- Information disclosure statements filed in the parent application will carry over automatically to the continuing application.
- Assignment of a parent application will act as assignment of a continuing application, but assignment documents must be recorded for the continuing application.
- Small-entity status will not carry over into a continuing application; applicant must provide a reference to the statement filed in the parent application or a copy of it.
- Affidavits/declarations must be also be refiled.
- A disclaimer made in the parent application will only carry over if the disclaimer states that it should. Otherwise, the disclaimer must be made in the continuing application.

Continuing Application Based on Foreign Patent/Certificate of Inventorship

A continuing application may rely on a foreign patent granted in another country, or (in some cases) on a foreign certificate of inventorship, for the benefit of a filing date. This is

different from the procedures for prosecuting the national stage of a PCT application. The following requirements apply:

- 0) Application must have been filed in a country that gives the same authority to U.S. applications. Countries currently satisfying this requirement are listed in the appendix; and
- 0) Both applications must have been filed by the same applicant; and
- 0) Both applications must claim the same invention; and
- 0) The U.S. application must be filed within 12 months (6 for a design application) of the foreign application; and
- 0) The applicant must file with the PTO a claim for priority and a certified copy of the foreign patent application-as-filed sometime during the pendency of the U.S. application. This may be corrected by filing a reissue application after issuance, or, in certain cases, by requesting a Certificate of Correction (granted at the Commissioner's discretion.)

If necessary, several foreign applications may be combined into one U.S. application, but the applicant must disclose this fact at the time of filing.

If the right of priority is based on a foreign application for a certificate of inventorship, applicant must also file:

-) An affidavit/declaration that applicant had the option of applying for either a certificate of inventorship or a patent, or
-) An affidavit/declaration that applicant was prohibited from filing a patent application because he is a government employee.

Continued Prosecution Application (CPA)

A continued prosecution application (CPA) can be a continuation or a divisional application. This is basically a more simplified version of a continuing application, but certain guidelines must be met. A CPA differs from a regular continuing application as follows:

- A request for a CPA operates as an express abandonment of the parent application.
- A request for a CPA operates as a waiver of confidentiality, such that all access granted with regard to the parent application is automatically granted for the CPA.
- A CPA can't claim any new matter (can't be a CIP.)
- A CPA request operates as the reference to the parent application and any chain of priority in order to receive the benefit of an earlier filing date. The specification need not specifically refer to the chain of priority.
- A CPA can be filed simply by filing a paper signed by a legal representative, or all assignees, or all applicants requesting a CPA and the filing fee.
- Affidavits, information disclosure statements, disclaimers made in the parent application, and authorization to charge all fees to a deposit account that are filed in a parent application automatically carry over into the CPA. Small business status must be referenced or a copy of the statement provided, as with continuing applications. An election in response to a restriction requirement only carries over if it's clear the CPA is intended to claim only the elected invention.

Substitute Application

A substitute application, also known as a refile application, is a duplicate of a previous application filed after the previous application has been abandoned. A substitute application does not benefit from the previous application's filing date since there is no common pendency.

National Stage Application

An application may be the "national stage" of a Patent Cooperation Treaty (PCT) international application. Under the Patent Cooperation Treaty, one international application may be filed that provides patent protection in many countries, but a national stage application must be filed and prosecuted in each country. More information about PCT applications and national stage applications is provided below.

Reissue Application

A reissue application is filed when a patent is found to be defective. See the section on reissue applications in the Patent Practice section.

Parts of a Utility Application

Applications should include the following items in order:

- 0) Cover sheet (provisional applications only.)
- 0) Title of the invention. Should be between two and seven words.
- 0) Cross-reference to related applications.
- 0) Statement regarding federally sponsored research or development (nonprovisional applications only.)
- 0) Reference to a microfiche appendix.
- 0) Background of the invention (nonprovisional applications only.)
- 0) Brief summary of the invention.
- 0) Brief description of the several views of the drawings.
- 0) Detailed description of the invention.
- 0) Claims (nonprovisional applications only.) Must start on a separate sheet.
- 0) Abstract of the disclosure. Must start on a separate sheet.
- 0) Drawings.
- 0) Oath/declaration.

Note that parts 2-11 are collectively referred to as the specification, but the detailed description of the invention is commonly referred to as "the specification."

Once an application is filed, no new matter may be added to it. (Amendments filed with the application constitute part of the original disclosure and will be added even if they contain new matter.)

A model isn't required for the application, but may be required by an examiner during prosecution.

Cover Sheet

A provisional application must be filed with a cover sheet or it will be filed as a nonprovisional application. The cover sheet must identify the application as provisional and must include:

- 0) The title of the invention.
- 0) The names and addresses of the inventors.
- 0) The name and registration of a representative.
- 0) The docket number of the application.
- 0) The correspondence address.
- 0) A statement regarding federally sponsored research or development (if applicable.)

Background of the Invention and the Information Disclosure Statement (IDS)

This section should describe both the field of the invention and the related art. This section may contain an information disclosure statement (IDS.)

An information disclosure statement (IDS) is a description of prior art references known to the applicant. The applicant may submit an IDS to comply with the duty to disclose relevant information about patentability. If an examiner requires an IDS, it may be filed with the next reply. The applicant may voluntarily file an IDS, but the requirements depend on when it's being filed:

-) If filed with the application, or within three months of filing or before examiner's first action (whichever is later), nothing more is required. Note that in CPAs, first office actions are usually made promptly, so an IDS should be submitted soon after filing.
-) If filed after A), but before the mailing date of a final action or notice of allowance, the applicant must file either a petition with fee or a statement that the information was discovered or provided to the applicant by a foreign patent office within the last three months.
-) If filed after B), but before payment of the issue fee, the applicant must file *both* a petition with fee and the statement described in B).
-) If filed after C), the applicant must file a petition to have the patent withdrawn from issue so that the examiner may consider the IDS.

The IDS must include:

- 0) A list of all patents and publications to be considered by the examiner; and
- 0) A copy of each patent (should reference it by patentee, patent number, issue date, and country) or publication (should reference it by author, title, publication title, pages, date of publication, and place of publication); and
- 0) If the patent or publication isn't in English, an explanation of the relevance of the disclosed information (if the patent or publication *is* in English, the applicant may, but isn't required to, provide this explanation); and
- 0) A copy of each patent or publication referenced, unless a copy was provided in a parent application. If the patent or publication isn't in English, applicant must also provide a translation.

An IDS won't be required or accepted for a provisional application, since it's not examined.

Brief Summary of the Invention

The brief summary should be directed to the object of the invention. It should discuss the purpose, nature, and operation of the invention.

Brief Description of the Several Views of the Drawings

The brief description should list all of the drawings and describe each in detail.

Detailed Description of the Invention (Specification)

The detailed description is commonly referred to as the specification, although that term more broadly includes much of the application. The specification must be clear enough to disclose the invention to the public and to notify the public of what is protected by the patent.

The specification must meet three distinct requirements to be sufficient:

- 0) The written description of the invention. Furthermore, the description must assert inventorship such that "persons of ordinary skill in the art [can] recognize that he or she invented what is claimed." The description must describe every limitation found in the claims, except those that are non-critical and would be obvious to a person of "ordinary skill in the art"; otherwise, the claims will be rejected for "failure to meet the description."

The description must state why the invention is useful, if the utility is not obvious from the invention.

The description should also serve as a dictionary for terms used in the claims, if used differently from their ordinary meaning in the art. The applicant may be his own lexicographer, but a term may not be defined to have a meaning opposite its ordinary meaning in the art.

- 0) The enablement (manner and process of making and using the invention.) Factual considerations in evaluating whether this requirement has been met include:
 - The breadth of the claims;
 - The nature of the invention;
 - The state of the prior art (the enablement should be more specific if the art is new or not well-known);
 - The level of ordinary skill in the art;
 - The level of predictability in the art (the enablement should be more specific if the art is unpredictable, and details should be omitted if one of ordinary skill can predict them);
 - The amount of direction provided by the inventor;
 - The existence of working examples; and

- The quantity of experimentation required to make and use the invention.

A claim for a composition must describe how to make the composition. An enablement for a composition claim is insufficient if it suggests a rare or new composition as a starting product. Conversely, a claim for a microorganism may suggest a standard, commonly available microorganism as a starting point.

Reduction to practice is not a requirement of a specification. The enablement may be fulfilled by describing a “working” example (based on work actually performed) or a “prophetic” example (based on predictable results.)

A claim for a biomedical inventions intended for use in humans may satisfy this requirement by describing *in vivo* testing in appropriately analogous animals.

A claim for a genus should describe the genus and a few representative species.

The standard for this section is rather low; the enablement must be sufficient to enable a person of “ordinary skill in the art” to make and use invention without undue experimentation, such that the person would not doubt the operativeness of the invention. If the examiner objects to a specification as non-enabling, the applicant should submit convincing evidence to the contrary. A non-enabling specification may not be corrected by amendment, since the original disclosure must be enabling.

- 0) The embodiment (the best mode of carrying out the invention.) The specification must describe the best mode he has conceived for implementing the invention. The applicant cannot skirt the issue by disclosing general statements of embodiment; if specific conditions are known to be the best for utilizing the invention, they must be disclosed. However, specific examples are not required if the invention would work equally well within a range of conditions.

The inventor is not required to update the embodiment if better modes are discovered after the application is filed.

The standard for this section is also low; the embodiment need not describe a perfect working mode, and will usually be found insufficient only in the case of concealment. The failure to disclose the best mode cannot be corrected by amendment, since this would constitute the addition of new matter.

A specification may disclose unclaimed subject matter, and claims to that subject matter may be added at a later date. The specification need not teach an enablement or embodiment for subject matter that is disclosed but not claimed. However, a specification may not include a reservation clause stating that the subject matter may be claimed in the future.

The specification may include chemical formulae, mathematical formulae, and tables, and these may be presented in landscape format if necessary. The specification may not include diagrams, charts, graphs, or flowcharts – these must be provided as drawings. All measurements referenced in the specification and claims should be in metric units followed by the English units.

Alterations to the specification filed with the application must be made in red ink before the oath/declaration is signed, and the inventor must date and initial the changes.

Parts of the specification may be cancelled by the applicant, but any claims relying on cancelled subject matter will be rejected by the examiner.

Incorporating by reference

The specification may incorporate subject matter by reference to other documents. Essential subject matter (material that's necessary to describe the invention, render the disclosure enabling, or describe a preferred embodiment) may be incorporated only by reference to a U.S. patent or a pending national application, unless those documents also incorporate the material by reference. Nonessential subject matter may be incorporated by reference to a U.S. or foreign patent, a national or international application, or a publication. Material incorporated by reference may later be imported into the specification by amendment, but the applicant must also submit an affidavit/declaration that the material being inserted was fully set forth in the prior reference. If the application is allowed, any references to applications that have been allowed must be replaced with references to the patent number; any references to applications still pending must import the subject matter and omit the reference (again, accompanied by affidavit/declaration.) These reference rules do not apply to references made not for the incorporation of subject matter, but for purposes of filing date.

Trademarks

Trademarks may be used in the application to note that an invention or part of the invention is covered by a trademark. The language must clearly identify the trademark (“this is known as X” is bad; “this is sold under trademark X” is good) and can't be used in lieu of a description of the invention or product (applicant can't just say, “this part is the type of product commonly known as X.”) Trademarks should be printed in ALL CAPS.

Copyrighted material/mask works

Copyrighted material and mask-work material may be included in the specification, but the applicant must include the following as the first paragraph of the specification:

A portion of the disclosure of this patent document contains material which is subject to (copyright or mask work) protection. The (copyright or mask work) owner has no objection to the facsimile reproduction by any-one of the patent document or the patent disclosure, as it appears in the Patent and Trademark Office patent file

or records, but otherwise reserves all (copyright or mask work) rights whatsoever.

A copyright notice (“© 2000 David Stein”) or mask work notice (“*M* David Stein”) must also be placed adjacent to the protected material in the specification.

Color drawing/photograph notice

If the applicant submits color drawings or photographs, the specification must include the following as the first paragraph of the specification:

The file of this patent contains at least one drawing/photograph executed in color. Copies of this patent with color drawing(s)/photograph(s) will be provided by the Patent and Trademark Office upon request and payment of the necessary fee.

Claims

All nonprovisional applications must have at least one claim. Claims have two purposes: to set forth the subject matter the applicant considers his invention, and to particularly point out and distinctly claim the metes and bounds of the invention. The scope and subject matter covered by the claims may change during prosecution, but the claims may only include subject matter that was part of the original disclosure.

The claims must be written with a reasonable degree of clarity. The applicant may be his own lexicographer, but if used differently than in the ordinary meaning in the relevant field of art, the applicant must supply definitions in the specification. A term may not be defined to have a meaning opposite its ordinary meaning in the art. The terms of the claim are read in their broadest sense, as they would be during an infringement action on a patent issuing from the application.

The claim section must begin on a new sheet of paper and should begin: “I claim...” or “The invention claimed is...”

Claims must be numbered sequentially (unless there’s only one claim, in which case it’s not given a number.) The order of claims can’t be changed, even if some are cancelled. Claims should be arranged in order of broadest to narrowest. Dependent claims should be grouped together with the independent claim. Product and process claims in the same application should be grouped separately.

All limitations of the claims must have a basis in the original disclosure, and must eventually have a basis in the specification. A claim included in the application-as-filed may set forth subject matter not described in the specification or drawings, but the specification and/or drawings must be amended to include the subject matter.

A claim may begin with a preamble describing the background of the claim. The preamble will be read to limit the scope of a claim only if it “breathes life and meaning

into the claim.” If the claim stakes out a proper claim to the invention if read without the preamble, the preamble won’t limit its scope.

A statement of intended use will alter the scope of a claim if it leads to a structural difference between the prior art and the claimed invention, but not if it’s merely a statement of purpose.

Special features of claims:

- Dependence: A claim can be independent, dependent, or multiply dependent.
 - Independent claims: An independent claim sets forth the metes and bounds of the invention without reference to other claims
 - Dependent claims: A dependent claim refers to a lower-numbered (previous) independent or dependent claim and contains every limitation of the claim. The test for whether a dependent claim is properly written is known as the interference test: any invention that infringes a properly written dependent claim must also infringe the claim on which it depends.
 - Multiple dependent claims: These claims alternately refer to several preceding claims. The referenced claims must vary in only one feature. An example of properly drafted multiple dependent claim:

- “4. The composition made by a process described in claim 1, 2, or 3.”

Examples of improperly drafted multiple dependent claims:

- Claims that vary in several ways (“machine described in claim 1 or 2, made by process 3 or 4...”)
 - Claims that refer to subsequent claims (“4. A machine described in claims 5 or 6...”)
 - Claims that rely on several claims in combination (“machine described in claims 1 and 2...”)
 - Multiple dependent claims that depend on other multiple dependent claims.
- Jepson claims: These are used for improvements, usually for combinations. They’re written with a preamble describing the old invention, the phrase “wherein the improvement comprises,” and a description of the improvement.
 - Genus-species claims: These are used for a claim to a generic invention that can occur in a variety of inventions.
 - Means-or-step-plus-function claims: 35 USC 112, paragraph six, states that a combination claim may set forth an element of the claim in “means-or-step-plus-function” form. This means that a claim may describe one element of a combination by a well-known component (means) and the function it is intended to perform: *e.g.*, “lamp means for heating a mixture.” The claim need not describe how to use the means for its intended purpose. A claim may not include a single means-plus-function claim; this is unduly broad and non-enabling. The claim must propose several elements that work together for a stated purpose.

Special terms used in claims include:

- Markush group: This is an alternative expression, such as “this element is selected from the group consisting of A, B, and C.” The elements recited must usually belong to a class recognized in the art as possessing a common property or performing the same function. The term *consisting of* must be used, not *consisting essentially of* or *comprising*. Repetition – e.g., “consisting of A, B, and C” where A is included in group C - is OK, as long as it’s not unnecessarily multiplicative (in which case a “double inclusion” rejection will be made.) A Markush group may be used in conjunction with a genus-species claim to claim a subgenus; i.e., when a genus claim is unpatentable, a claim to a subset of species that share a specific property may be patentable by describing it as a Markush group.
- Numerical range: A claim may include a numerical range, such as “pH 6 to 8”. Preferences for a certain value in the range should *not* be stated in the claim, but discussed in the description. “Up to” a certain value includes 0.
- Vague terms (about, essentially, similar, substantially, type, relatively, like, on the order of, substantial portion, comparable, superior): These terms are OK as long as the boundaries claimed are reasonably discernable to one of ordinary skill in the art.
- A negative limitation, such as “A being any element in genus B *except* for C or D” – is generally OK if the reason for the limitation is supported by the specification.
- “Consisting of”: A transitional term meaning “composed only of”. The claimed invention has *every* element described in the list, and all elements not included in the list are excluded. A dependent claim can’t add other elements to this list.
- “Consisting essentially of”: A transitional term meaning “composed of, but also including elements that do not materially affect the basic and novel characteristics of.” The following list sets forth the main, essential elements, but leaves room for non-critical, unspecified elements. All elements that would materially change the invention are excluded from the list.
- “Comprising”: A transitional term meaning “including” that is used as an open-ended description, not excluding unrecited elements from the following list.
- “An effective amount” is OK as long as the “effect” desired is described in the specification.
- “Or” and “optionally” are generally OK.

Objections to the form of a claim include:

- Aggregation: The elements of a combination claim do not work together for a common purpose – e.g., “a washing machine combined with a telephone.”
- Prolix: The claim is so minutely detailed or unreasonably protracted that the scope of the claim is indefinite.
- Multiplicity: Claims are unreasonably duplicative. A large number of claims is OK if they all clearly claim a different scope of the invention.
- Indefinite: The claim is directed to more than one statutory class, such as *both* a product *and* the process of using it; or the claim is directed toward a particular use for an invention, which is not a statutory class.
- Omnibus: The claim broadly claims “The device substantially as shown and described.”

- Incomplete: The claim is dependent on a base claim that has been rejected. (If the independent claim has been cancelled, the dependent claim is rejected on this basis.)
- Lack of inventorship: None of the named inventors contributed to the subject matter of the claim.

Trademarks

Trademarks are OK for use in claims, but they shouldn't be used to specify a product or element, since the trademark is only a symbol of the source of the goods.

Abstract

The abstract is a concise summary of what is claimed in the application. It should be one page long, containing 50-250 words or 25 lines of text. It shouldn't use legal terminology and shouldn't proclaim the merits of the invention; this is better discussed in the brief summary of the invention. The abstracts of chemical inventions should mention the class of chemicals in which the claimed chemical belongs.

The abstract has no bearing on the scope of the claims. An abstract filed or amended after the filing date cannot add new material.

Appendix

A software patent that includes a code listing more than 10 pages must be submitted as a microfiche appendix, with a reference to the appendix in the specification.

- The microfiche should contain a heading, with the leftmost 1/3 blank for office use, the middle 1/3 the invention title or applicant's name, and the rightmost 1/3 sequence information (e.g., "1 of 4.")
- The first frame should contain a test target.
- The second frame should contain a fully descriptive title and the inventor's name.
- The pages of microfiche should be consecutively numbered.
- Pagination should be from left to right and top to bottom.
- The microfiche must be reduced to 24:1 with 120 lines/mm resolution (5.0 target.)
- An index may be included on the last frame.

Drawings

Every application must include drawings "if necessary for the understanding of the subject matter." The following inventions are by default considered not to require a drawing:

- Processes and methods.
- Compositions of matter.
- Coating substances and laminates.
- Substitutions of a new material in place of an old material in a device, machine, etc. that is well-known or patented (e.g., improvements in a hydraulic system by using a more viscous type of fluid.)

Applications for these inventions will be considered complete if filed without a drawing, unless the application specifically mentions a drawing; if so, the examiner will determine

its necessity and consider the application incomplete (if drawing is necessary) or complete but omitting an item (if drawing is unnecessary.) All other inventions are assumed to require a drawing. All design applications *must* include drawings.

The drawings must show every limitation of the claimed invention.

Drawings should list on the back the applicant's name, the docket number, and the title of the invention. Drawings must be numbered sequentially.

Drawings may be cancelled, but cancellation usually requires amendment of the specification and claims to remove references to it, and subsequent drawings must be renumbered to maintain sequential numbering.

Drawings will only be transferred between applications on petition showing that their resubmission would constitute a hardship.

PTO guidelines for drawings

In addition to being inspected by the examiner for substance, the drawings will be examined by the draftsman for form. Drawings must conform to strict PTO guidelines. Those that are substantially complete but don't follow these guidelines may be accepted by the PTO on condition that a formal, compliant drawing will be filed within three months. Such resubmissions should indicate the date of notice of allowability, the issue batch number, and the application number in the upper right-hand corner, and must be submitted with a letter to the draftsman indicating the changes to be made.

- Drawings should usually be submitted in black and white ink. The applicant may petition for authorization to file color drawings or photographs, if the nature of the invention requires this, and must file three copies of the color photos/drawings with the petition and include notice of the color photos/drawings in the specification (see above.) Black and white photos are usually rejected, unless the invention is particularly well shown this way (especially for crystalline structures and textile fibers); applicants must petition to include them and provide three copies of the photos with the petition.
- The drawing may be presented in a plan view, an elevation view, a sectional view, a perspective view, an exploded view, a partial view, an alternate position view, or a modified form view. Each view must be separated with a border. At least one view must be comprehensive enough to be publishable in the Official Gazette.
- A scale indicator should be included. Must be graphical; can't just read, "1/2 scale."
- Shading may be used where appropriate.
- A legend may be included.
- Reference characters can be used, but all reference characters should be described in the specification. The same part shown in several views should be referenced by the same reference character. Lead lines may be used to connect a reference character with the part it represents.
- A copyright or mask work notice may be included near the protected material, but a statement of protection must be included in the specification (see above.)

- A crosshair should be included in two opposite corners for scanning purposes.
- Drawings should *not* show a modification of an invention by marking up the old version with broken lines – it’s too confusing. Instead, one drawing should show the improved invention, and another should show the improvement in isolation.
- A drawing showing only prior art will only be admitted if necessary, and it must be clearly marked “Prior Art.”

Drawings that are admitted will not be returned to applicant. Non-admitted drawings will be returned on applicant’s request.

Oath or Declaration

All applicants must file, at some point in the prosecution of the application, an oath (a statement sworn before a government officer) or declaration (a statement acknowledging the penalties for fraudulent statements) by the inventor attesting to the truth of the information provided in the disclosure.

When filed with an application, an oath/declaration must include:

- OO) Reference to the attached specification, or
- OO) The attorney docket number on the specification as filed, or
- OO) The title of the specification.

When filed after an application, an oath/declaration must be filed with a surcharge fee and must include:

-) The application number, or
-) The serial number and filing date, or
-) The attorney docket number on the specification as filed, or
-) The title of the specification as filed and reference to an attached copy of the specification, or
-) The title of the specification as filed and a cover letter identifying the application by application or serial number plus filing date.

All oaths/declarations must also include:

- 0) Full name, residence, and citizenship of each inventor, and whether he is a sole or joint inventor; and
- 0) The signature of the inventor, or the signature of someone signing on behalf of the inventor and an indication of the signing person’s relationship to the inventor; and
- 0) A statement that the inventor has reviewed the specification, understands it, believes the inventors to be the original and first inventors of the claimed invention, and acknowledges the duty to disclose all information relevant to patentability; and
- 0) For claims of priority based on foreign filing, identification of foreign application number, country, and date of filing; and
- 0) For oaths, proof that the oath was sworn before some official (foreign or domestic) acting within his jurisdictional venue. Proof should be an official seal affixed to the document. An attorney may act as an official throughout the U.S. except in Washington, D.C.; and
- 0) For declarations, a statement that the declarant understands the duty to disclose and the penalties for false declarations.

Oaths/declarations usually include a power of attorney, but this may be submitted separately.

A copy of a properly executed oath is acceptable. A copy of an oath/declaration filed in a parent application can be submitted in a continuing application, except for a CIP.

The names of the inventors will be taken from the oath/declaration and will only be corrected by petition in cases of typographical errors or legal name changes.

If the application issues as a patent, the order of inventors' names will be taken from the oath/declaration. This may be changed by petition.

Inventorship

Except in extraordinary circumstances, an application must be made in the names of the inventors. An inventor constitutes any person who maintained intellectual domination over the invention. Someone who only provides suggestions or advice or reduces another person's invention to practice is not an inventor.

If an inventor is legally incapacitated or dead, a guardian or executor may file an application on his behalf. Applicant must provide a court certificate or legal memorandum prepared and signed by an attorney that affirms the applicant's administrative authority. A subsequent patent will issue in the name of the applicant, not the inventor.

If inventor dies or becomes incapacitated after filing an application but before termination of proceedings, a guardian, executor, or heir can prosecute the application. A subsequent patent will issue in the name of the inventor.

If an inventor in a joint application refuses to sign oath to file application or can't be found, the other joint inventors may petition to file on his behalf. The petition must include:

- 1) The petition fee, and
- 2) A statement showing that inventor can't be found after diligent search, or that inventor refused to sign, and
- 3) An oath/declaration signed on behalf of nonsigning inventor (in addition to other inventors' own signatures), and
- 4) The last known address of nonsigning inventor.

If *none* of the inventors can be found or will cooperate, someone who has a proprietary interest may petition to file on behalf of all inventors. The petition must include:

- 1) The petition fee, and
- 2) An oath signed by them (if corporation, must be signed by an officer and title of officer must be provided), and
- 3) A statement of relationship to the inventors, and

- 4) Proof that the applicant can't be found or is uncooperative (should be affidavit by person with firsthand knowledge, stating facts of refusal or diligent search; should also state time and place of refusal), and
- 5) The last known addresses of the inventors, and
- 6) A clear showing that inventor assigned or intended to assign his rights to the applicant, or that the applicant has a proprietary interest (can be a copy of assignment document, affidavit that inventors intended to assign to applicant.)

A nonsigning inventor has the following rights:

- He can protest his designation in an application.
- He can file his own application and provoke an interference with original application.
- He can inspect and copy patent application or have legal representative do this for him.
- He can join the application by providing an oath/declaration, but can't interfere with prosecution by signed inventors.
- If application is allowed, he has all the rights of signing inventor.

Supplemental Oath/Declaration

A supplemental oath/declaration is required if a claim is added for subject matter disclosed but previously unclaimed, or if it is discovered that the oath/declaration doesn't cover the whole disclosure in the specification.

Correction of Oaths/Declarations

Oaths/declarations may not be amended. A substitute must be filed according to the following procedures.

An oath/declaration that is substantially acceptable but improperly executed may be accepted by the PTO on condition that a properly executed oath is filed in a timely manner.

An oath/declaration that names the wrong inventors for an original (i.e., a non-reissue) application may correct inventorship under the following procedures:

- If no oath has been filed yet in the application, but inventors were incorrectly named in a specification or whatever, the applicant may file an oath/declaration under 37 CFR 1.48(f) naming the correct inventors, and the inventorship will be corrected automatically (only applies after December 1, 1997.) No petition is needed.
- If the inventorship was incorrectly named in the original nonprovisional application, the applicant can file a petition under 37 CFR 1.48(a) including:
 - 1) The petition fee; and
 - 2) A statement by each inventor being added or deleted that the inventorship error occurred without deceptive intent; and
 - 3) A supplemental oath or declaration; and

- 4) The written consent of any assignees, if they exist (for organizations, can be filed by an officer including the officer's title, or by a person acting on their authority), or an affirmative statement that no assignees exist.
- If the cancellation of a claim in a nonprovisional application eliminates the inventive efforts of a named inventor, the applicant can file a petition under 37 CFR 1.48(b) including:
 - 0) The petition fee, and
 - 0) A statement by each inventor being deleted that his inventive efforts are no longer claimed.
 - If the addition of a claim in a nonprovisional application for previously disclosed but unclaimed subject matter adds the inventive efforts of an unnamed inventor, the applicant can file a petition under 37 CFR 1.48(c), including:
 - 0) The petition fee, and
 - 0) A statement by each inventor being added that his addition is required for this reason and occurred without deceptive intent, and
 - 0) A supplemental oath or declaration, and
 - 0) The written consent of any assignees if they exist (for organizations, can be filed by an officer including the officer's title, or by a person acting on their authority), or an affirmative statement that no assignees exist.
 - If an inventor needs to be added to a provisional application, the applicant can file a petition under 37 CFR 1.48(d), including:
 - 0) The petition fee, and
 - 0) A statement by the inventor being added that the error occurred without deceptive intent.
 - If an inventor needs to be eliminated from a provisional application, the applicant can file a petition under 37 CFR 1.48(e), including:
 - 6) The petition fee, and
 - 6) A statement by the inventor being deleted that the error occurred without deceptive intent, and
 - 6) The written consent of any assignees (see B4 above.)
 - In any of these cases, if overlap of at least one inventor exists, by filing a continuing application setting forth the correct inventorship in a newly executed oath or declaration.

Design Patent Applications

A design patent describes any new, original, ornamental design that is embodied in an article of manufacture. A design patent protects the visual characteristics of the article of manufacture, not the article itself. Notable differences between a design application and a utility application:

- The term of a design patent is for 14 years from its issue date, instead of 20 years from its filing date.
- No maintenance fees are required for a design patent.
- Design patents are limited to one claim. Distinct designs *must* be patented separately.

- A design application can't be a PCT application or a provisional application.
- Foreign priority for utility patents requires filing the U.S. application within 1 year of the foreign application; for design patents, this window is only 6 months.

A design application has the following parts:

- 0) Design application transmittal form.
- 0) Fee transmittal form.
- 0) Preamble (name of applicant, title of design, and brief description of the intended use of the article.)
- 0) Cross-reference to related applications.
- 0) Statement regarding federally
- 0) Statement regarding federally sponsored research or development.
- 0) Description of the drawings.
- 0) Feature description (specification.)
- 0) Claim.
- 0) Drawings or photographs.
- 0) Oath/declaration.

Title

The title of the design should identify both the article and the claimed design (“handle” is insufficient; “purse” is insufficient; “handle of a purse” is fine.) The language of the title must be the same language used in the claim.

Feature description (specification)

The specification need only be a brief description of the design. The specification may include the following statements:

- A description of portions of the design that are hidden from view in the drawings.
- A statement that the parts of the drawings shown in broken lines aren't claimed as part of the design.
- If not included in the preamble, a statement of intended use of the article.
- A description of the novel “characteristic features” of the design.

The specification *may not* contain the following statements:

- A disclaimer of any portion of the drawings shown in solid lines.
- A description or modification of the design that's not supported by the drawings.
- A statement describing the function of the article unrelated to the design.

Claim

The claim must formally claim the design as described and shown in the drawings. The claim should read simply: “The ornamental design for (title of invention) as shown,” or “as shown and described” if the specification describes features hidden from view in the drawings. The claim may not read “substantially as shown” or “the design as shown or similar design”; such a claim will draw a rejection under 35 USC 112 paragraph 2.

Drawings

Drawings are *always* considered necessary for the disclosure of a design. Drawings must generally comply with the requirements for drawings in utility applications.

The claimed design must be shown in solid lines, whereas parts of the article unclaimed in the design must be shown in broken lines. As with utility applications, informal drawings may be submitted on condition that formal drawings will be submitted if the application is allowed. Enough drawings should be submitted to show every part of the claimed design, but a duplicative drawing should be omitted (*e.g.*, if the left and right views of a design are symmetrical, one should be submitted, and the specification should state that the other view is symmetrical.) Surface shading should be used to indicate the three-dimensionality of the article, but black surface shading should never be used.

Color drawings, black & white photographs, and color photographs must be submitted according to the rules used in utility applications, but a further requirement is that a design application may only include one kind of medium (*only* black & white drawings, *only* color photographs, etc.) Color drawings and photographs will be allowed when the coloring is an essential limitation of the design, and this conclusion will be drawn from any patent containing color drawings or photographs. However; coloring an entire surface will interfere with shading to show three-dimensionality; instead, the color of a surface should be designated by outlining the surface in the color.

All features shown in the drawings or photographs that are not in broken lines constitute part of the claimed design. If a photograph shows other details, the applicant must disclaim them in the specification.

Copyright/trademark

A design may be the subject of a copyright, a trademark, and a design patent. The applicant may include notice of the copyright or trademark in the drawings and/or specification. However, as with utility applications, a design can't simply refer to a copyright or trademark for purposes of disclosure.

Plant Patent Applications

A plant patent may be obtained for any plant that:

- 3) The inventor has reproduced asexually, such as by cuttings, layering, budding, grafting, or inarching; and
- 3) The inventor invented or discovered in a cultivated area; and
- 3) That is not a tuber (because the reproducing part of tubers is often used as food.)

The rights conveyed by a plant patent are to prevent anyone else from asexually reproducing, making, or using the plant.

A plant patent application may benefit from a right of priority in any UPOV country (see appendix) based on a foreign application as long as the applicant has registered a variety name.

The applicant must submit two copies of an application for a plant patent. A plant patent application includes the following parts:

- 0) Plant Application Transmittal Form.
- 0) Fee Transmittal Form.
- 0) Title of the invention.
- 0) Cross-reference to related applications.
- 0) Statement regarding federally sponsored research and development.
- 0) Background of the invention.
- 0) Brief summary of the invention.
- 0) Brief description of the drawing.
- 0) Detailed Botanical Description.
- 0) Claim.
- 0) Abstract.
- 0) Drawings (in duplicate.)
- 0) Oath/declaration.
- 0) Plant color coding sheet.

Claim

A plant patent application includes a single claim, directed to the plant described and shown, and may list distinguishing characteristics. However, the claim is for the whole plant, not just the distinguishing characteristics. Although referring to a plant as “a new kind of blackberry” is common in botany, the claim must state “blackberry bush.”

Drawings

Drawings must be submitted that disclose all distinctive features of the plant. If color is a distinguishing feature, the drawings must be in color; otherwise, the drawings may be in color or in black & white. The drawings must be submitted in duplicate.

Oath/declaration

In addition to the requirements of oaths/declarations set forth for utility applications, an oath/declaration in a plant patent application must also state that the inventor invented the plant or discovered it in a cultivated area, and that he successfully asexually reproduced it.

Color coding sheet

The plant color coding sheet must list every structure of the plant in which color is a distinguishing feature, and state the color code (according to a color dictionary) that best describes the color.

Model

An applicant may be requested to provide a specimen of the plant as a “model” of the invention. A deposit may be made according to the Deposit of Biological Materials rules, but such a deposit is not required, and the application will not benefit from the rules of that section.

Other Important Submissions in All Applications

Model

The old patent laws required a model for every application. Currently, a model will only be accepted if the examiner specifically requests one to demonstrate utility, or if the applicant files a petition showing why a model is necessary for prosecution. A model should typically be small enough to fit into the application folder. The applicant may also bring a model to an interview to demonstrate functionality.

For purposes of return, models should be labeled with application number, filing date, and attorney's name and address for purposes of return after prosecution. Applicant may request the return of a model, at his expense, within a reasonable time after termination of proceedings; but the PTO may determine that it's necessary to keep the model for inspection purposes.

Foreign Filing License

For inventions made in the U.S., an applicant cannot file a patent application in a foreign country unless the applicant obtains a foreign filing license or until six months after inventor has filed an application in the U.S. Normally, a foreign filing license is granted automatically, and notice of the license is listed on the filing receipt (issued 3-4 weeks after application is filed.) If not granted automatically or applicant hasn't filed a U.S. application, he can petition for foreign filing license. Applicant can also petition for a retroactive license, which must include:

- 0) The petition fee, and
- 0) A list of the countries in which applications were filed, and
- 0) The dates of such filings, and
- 0) Statement that no secrecy order exists, that license is being diligently sought after improper filing was discovered, and an oath or declaration that error occurred without deceptive intent (must be an explanation based on facts.)

Terminal Disclaimer

In some cases, the applicant may be required to file a terminal disclaimer. This is a surrender of part of the tail end of a patent term. This may be required as a penalty – e.g., as part of a petition for revival of an application after an unintentional delay caused its abandonment – or to take advantage of a rule – e.g., to disqualify a document that's a prior art reference under 35 USC 102(e) from an obviousness consideration.

Request to Make Special

Applications are usually examined in the order they are received, but some applications are entitled to expedited processing. An application may be accorded "special" status by the PTO *sua sponte* or on petition from the applicant. The petition may or may not require a fee, depending on the basis for requesting special status.

The following circumstances can support a petition for special status:

- The applicant's age or health.
 - The applicant is in poor health. The applicant must submit evidence, such as a medical report. No petition fee is required.
 - The applicant is over 65. The applicant must submit evidence, such as a birth certificate. No petition fee is required.
- The invention relates to a favored area of invention. For all of these, the applicant must explain the benefits of the invention in the petition.
- The invention relates to the conservation of energy, such as finding new energy resources or enhancing the efficiency of energy use. No petition fee is required.
 - The invention relates to the environment, such as enhancing environmental quality. No petition fee is required.
 - The invention relates to superconductivity. No petition fee is required.
 - The invention relates to improving the safety of recombinant DNA research.
 - The invention relates to HIV, AIDS, or cancer research.
 - The invention is a counter-terrorism measure.
- Other circumstances compel the PTO to grant special status.
 - The application is important for public service and a governmental officer requests special status for the application.
 - The means for manufacturing the invention are ready and waiting for a patent to issue. The applicant must demonstrate the following in the petition:
 - 14) The manufacturer possesses the funds and equipment to begin producing the invention in quantity (if the manufacturer is an individual, he must include a statement from an investor affirming he has the available funds); and
 - 14) The manufacturer won't proceed without a patent; and
 - 14) The manufacturer is obligated to start manufacturing once a patent issues; and
 - 14) The applicant has made a thorough search of the prior art or has a good working knowledge of it.
 - The applicant's invention is currently being infringed. The applicant must demonstrate the following in the petition:
 - 0) An infringing product is on the market or an infringing method is currently in use; and
 - 0) The applicant believes that at least one claim in the application is *unquestionably* infringed; and
 - 0) The applicant has made a thorough search of the prior art or has a good working knowledge of it.
 - The applicant has made a thorough search of the prior art. The applicant must demonstrate the following in the petition:
 - 0) All claims are directed to one invention, or the applicant will elect one invention if the examiner files a restriction requirement; and
 - 0) An examination was conducted of the prior art (applicant must list the areas searched, provide a copy of each close reference found, and argue why the claimed inventions differ.)

Applications accorded special status under this method will undergo an accelerated examination and a first office action will issue. If not allowable, the applicant should set up an interview strictly on the grounds claimed, and the examiner will file a final office action within one month of the interview.

- The invention is related to biotech and the applicant is a small entity. The applicant must demonstrate the following in the petition:
 - 4) Small entity status exists; and
 - 4) The invention is a major asset of the small entity; and
 - 4) The value of the invention will be impaired if special status is not accorded.
- The application is a reissue application.
- The application is involved in a reexamination proceeding.
- The application has been remanded by the Board for action after appeal.
- The application may be involved in an interference.
- The application is ready for allowance or final rejection.
- The application has been pending for more than five years.

Assignment Records

Patents and patent applications can be assigned like personal property. Any owner of a patent can assign a patent or application without the consent of the other owners.

Assignment must be recorded in the patent office within three months by filing an assignment document (if not in English, must include translation) and a cover sheet, stating:

- 0) Name of assignor, and
- 0) Name and address of assignee, and
- 0) Description of interest being transferred, and
- 0) Application or patent numbers, and
- 0) Name and address of party to whom correspondence should be directed, and
- 0) Number of applications and patents being transferred and the amount of the fee, and
- 0) The date the assignment document was executed, and
- 0) Whether or not a domestic correspondent has been identified, and
- 0) A statement that this information is true and accurate, and
- 0) Signature of the party submitting the document.

Assignments are effective as of the date of filing the assignment document. If the cover sheet contains an error, it will be corrected only if the error is apparent when the cover sheet is compared with the assignment document. The applicant must file:

- 0) A copy of the original recording document, and
- 0) A corrected cover sheet, and
- 0) A new recording fee.

If the assignment document names the wrong assignee, the original filing date can be secured by correcting the errors promptly. The applicant must file:

- 1) A copy of the original document with all changes marked up and initialed and dated by the assignor, and

- 1) A new cover sheet identifying this as a “corrective document” and listing the reel and frame number of the original document, and
- 1) A new recording fee.

Recorded assignments carry over from provisional applications to nonprovisional applications, and from parent application to continuing applications, except for CIPs, in which the document must be refiled.

Assignees can prosecute patents to the exclusion of the assignor, but must first submit evidence of assignment or specify reel and frame number of assignment record filed in PTO. An assignment does not automatically revoke powers of attorney granted by the assignor. An allowed application issues to the last recorded assignee of full interest.

PTO rules for access to assignment records are described in the “Confidentiality” section above.

Biological Deposit

Some biological compositions are incapable of being adequately described without reference to a sample. A biological sample of any material that is self-replicating may be filed with a biological depository for this purpose. The depository will maintain the viability of the material and furnish members of the public to fulfill the enablement requirement of the application.

Plant material does not have to be deposited to obtain a plant patent.

In order to rely on a biological deposit, the applicant must:

- 0) Reference the biological sample in the specification; and
 - 0) File a statement of viability, identifying:
 - 0) The depository, and
 - 0) The depositor, and
 - 0) The date of deposit, and
 - 0) The identity of the deposit and its accession number assigned by the depository, and
 - 0) The date a viability test was performed, and
 - 0) The procedures that may be used to obtain a sample, and
 - 0) A statement that the deposit is capable of self-reproduction.
- and
- 0) If deposited after the filing date, the applicant must submit a statement by someone with personal knowledge of the composition that material deposited is the material disclosed and claimed in the application.

A biological deposit may be made before the application or any time during its pendency. If the examiner makes a rejection for failure to reference such a deposit, the applicant may make such a deposit and reference it in the specification, or the applicant may file written assurance with the examiner that a deposit will be made.

The deposit must be made in any International Deposit Authority or any other depository that the PTO finds suitable. The deposit will be kept for 30 years, and then until 5 years have passed without a request for the material.

If seeds are being deposited, a sufficient number is required – the depository will need 2,500 seeds unless the applicant can justify a lesser number.

Sequence Listing

Any application claiming a nucleotide and/or amino acid sequence must contain a paper copy of the sequence, listing each claimed sequence. The applicant must also submit a computer-readable copy and a statement that the computer-readable copy is identical to the paper copy. If a prior application claimed the same sequence and a computer-readable copy was filed in it, a later application may omit a computer-readable copy by referencing the prior application. If a sequence is unbranched and consists of more than 9 bases or more than 3 non-D amino acids, the applicant must specify the sequence using the standards established by the WIPO. If the application fails to meet these requirements, the applicant must submit the missing or incorrect parts and a statement that they contain no new matter in order to avoid abandonment of the application.

PART II: PATENT PROSECUTION

Brief Overview

All applications are examined by the PTO for patentability. A new application is assigned to an examiner familiar with the particular field of art to which the invention pertains. The examiner will review the application and inform the applicant of whether the application is allowable or not (known as an office action.) The examiner may also call the applicant to discuss the application or schedule an interview for this purpose.

If the application is found patentable, the application will be allowed for a patent. If the application isn't patentable as filed, the applicant may reply with an argument for its allowability and/or a revision of the application as necessary. An examiner may make two kinds of actions adverse to patentability: rejections (arguments against the substance of a claim to an invention) and objections (arguments against the form of the application.) The applicant may request that objections wait until the rejections have been resolved. If the applicant's reply does not fully refute a basis for rejection, the examiner will make a "final" rejection of the application, restating the same basis. The applicant may then cancel the rejected claims (and gain a patent on those that are allowable), or take some other action as directed by the examiner to make it allowable, or appeal its rejection. Note that review of a rejection is by way of appeal to the Board, but review of an objection is by way of petition to the Commissioner.

Examiner's Actions

Examination Basics

An invention is only patentable if it meets the following requirements:

- Useful: must have some value in the "useful arts" (35 USC 101).
- Novel: not claimed or known before the applicant invented it (35 USC 102).
- Non-obvious: not a simple, apparent modification of what was claimed or known before the applicant invented it (35 USC 103).
- Sufficiency of disclosure: must have a disclosure sufficient to support specific claims (35 USC 112).

To ensure that an invention fulfills these requirements and meets the other rules of the PTO, the application is examined for patentability. The entire application is designed to describe the invention broadly, but the invention for which the applicant seeks to obtain a patent is set forth specifically by the claims; therefore, the examination must focus on the claims.

If the examiner finds that a claim is unpatentable in substance, he will reject it. The claims will be interpreted broadly; if any interpretation of an ambiguous claim would be unpatentable, the claim must be rejected. The examiner must support a rejection by citing

a requirement of patentability (those listed above) that has not been fulfilled and by providing evidence of the failure. Evidence may be a “reference” (a patent, written publication, or some other document), evidence of conduct of others, personal knowledge of the examiner, or any combination of these things; but references must be available by statute under 35 USC 102 or 35 USC 103.

Informal or obviously deficient disclosures undergo a brief examination, after which the examination records a deficiency and rejects the application. If the terminology used in the disclosure diverges so much from the language of the art that the application can’t be examined, the examiner will make whatever examination is possible and request the applicant to revise the application to conform to the regular terms of art.

In reviewing an application, an examiner is not simply an opponent; he should work with the applicant to make the application allowable. If the examiner finds that a claim is patentable in theory but defective in form, he should note its allowability and suggest revisions for correcting the defect. If the examiner notices patentable but unclaimed subject matter in the specification, he should make a note of this. If the application is being prosecuted *pro se* and the applicant has demonstrated patentable subject matter, the examiner should draft allowable claims for suggestion to the applicant.

Examiners are required to give full faith and credit to the actions of prior examiners in the same application. If a claim or a set of claims should be examined by a different examining group (because it falls into a different field of art), the claims are referred for a Patentability Report.

References

In examining the novelty of a claimed invention, an examiner may compare the invention with prior art references, including U.S. patents, foreign patents, and publications. References are available to serve as the basis for rejection as noted in 35 USC 102 and 103. (The only exception is set forth in 103(c): patents available under 102(f) or 102(g) are *not* available for an obviousness determination if the applicant owned the patent at the time the invention claimed in the application was invented.)

A prior art reference must usually have an effective date before the application’s filing date to be used as a reference against it. Sometimes, however, a reference that postdates an application may be used as a basis for rejection if it identifies a “universal fact,” such as evidence that as of the filing date, the claimed characteristics were well-known, or to describe the level of ordinary skill around the time the invention was made.

Some references may only be used as grounds for a rejection if they were written, owned, or used “by others.” Any change in inventive entity is enough to satisfy this requirement. a reference written by some of the inventors and one other person is written “by others.” In this case, the reference may be avoided:

U.S. patents

A U.S. patent may serve as a reference, but it should be within the same or an analogous field of art or pertinent to the same problem the applicant's invention is designed to solve. Matter that was cancelled during prosecution is only available if the application is open to the public and the cancelled disclosure is evidenced in the file wrapper. An application that is converted into a defensive publication or a statutory invention registration is not a patent.

Foreign patents

A foreign patent can only serve as the basis for a rejection if the rights conveyed by the foreign patent are similar to those granted by a U.S. patent. A foreign patent becomes effective for serving as the basis for a rejection on the day it becomes enforceable.

Publications

A publication may serve as the basis for a rejection if it qualifies as a "printed publication" and is available to the public, such that one of ordinary skill in the art could find it. The effective date of a publication is the date it was disseminated to the public. Internal documents, or those to which the public does not have unrestricted access, are not valid. Who actually reads the publication is irrelevant. Even an oral presentation may constitute a publication if printed copies are available without restriction. Statutory invention registrations and defensive publications are considered publications. Abandoned applications that are open to the public, or that are incorporated or referred to in an issued patent, may be treated as publications.

The examiner should usually support a rejection by citing the "best" example in the prior art of why the applicant's invention is anticipated or obvious. However, multiple references may be cited to support a "primary" reference that serves as the grounds for a rejection for the following purposes:

- To prove that the primary reference is enabling.
- To explain the meaning of a term used in the primary reference.
- To show that an essential characteristic omitted from the discussion of the invention in the primary reference is, in fact, essential.

35 USC 101: Utility

To be patentable, an invention must be useful. Inventions that aren't useful and can't be patented include:

- Inventions that are inoperative for the purpose described.
- Inventions that are fraudulent.
- Inventions that are frivolous.
- Inventions that are injurious to public health or against public policy, including those useful only in a nuclear weapon (specifically barred by the Atomic Energy Act.)
- Inventions that don't fit within one of the statutory classes of patentable inventions – the invention must be a "process, machine, manufacture, or composition of matter, or an improvement thereof" (35 USC 101), or a plant (35 USC 161), or a design (35 USC 171). Microorganisms are patentable if they are

“the result of human intervention.” Computer programs are patentable as processes if they 1) result in some physical transformation outside the computer (a “post-computer process activity”) or 2) have a practical application (a “pre-computer process activity.”) Pharmacological inventions are considered useful if effective for some purpose.

- Scientific principles unconnected with an actual invention.
- Naturally occurring materials, unless the claimed composition is much purer than that found in nature, etc.
- New uses, functions, or properties of a previously known or patented invention. A known or patented invention is assumed to *inherently* claim all uses and properties; it does not become patentable again if the applicant merely notices something new about it. However, a new use that depends on a previously unknown property of a composition is patentable.

If the utility of an invention is not obvious, the applicant must assert its utility, or the application will be rejected. Usually, however, the utility of an invention will not be doubted unless it’s “incredible” (i.e., if the logic underlying the assertion of utility is seriously flawed, or the facts don’t support an assertion of utility) or if it’s totally incapable of producing the claimed result (not just inefficient, but impossible – e.g., a perpetual motion machine – inventions that fail this also violate 35 USC 112 first paragraph, because the disclosure is non-enabling.) In the event of a utility rejection, the applicant may respond by:

-) Amending the claims to show utility; or
-) Presenting evidence of utility, like an inventor’s affidavit/declaration or publication; or
-) Oppose the examiner’s argument of non-utility.

Important notes on utility for certain kinds of claims:

- Composition claims: A composition claim that’s substantially identical to a composition already known or patented will be rejected for anticipation or obviousness. However, it may be patentable if the applicant can show that the products differ in some important characteristic. This is an unlikely defense, however, since products of identical composition cannot have mutually exclusive properties, especially for chemical inventions.
- Product-by-process claims: If a product is patentable, the process of making it is also patentable.
- Machine claims: A patentable machine must be structurally different from all prior art. The claim covers the structure of the machine, not its function. A prior art reference that teaches a different function for the same machine is grounds for rejection, but a prior art reference that teaches a different machine for performing the same function is *not* grounds for rejection. The material on which the machine operates is irrelevant to patentability.
- Process claims: In contrast to machine claims, the material on which a process is performed is relevant to patentability. Using a well-known process on a new material, or using a well-known process to generate a new product, may make the

process patentable. This determination is very fact-specific; it depends on whether the prior art taught that the modification was obvious.

- Plant patents: A plant patent must enable one of ordinary skill to cultivate the plant. A prior art reference used for rejection must also disclose an operative method for cultivating the plant.

35 USC 102: Anticipation

To be patentable, an invention must not have been known or patented before the applicant filed the application. Otherwise, the invention is considered “anticipated” by the prior art. The prior invention must have disclosed *every* limitation of the claimed invention.

35 USC 102 covers anticipation. Inventions are not patentable if:

35 USC 102(a)

“The invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.”

An invention is unpatentable if

- C) Known by others, used by others, described in a publication written by others, or patented in the U.S. before the application was filed; or
- C) Described by others in a publication written by others or patented in a printed publication in a foreign country before the application was filed.

“Used” means publicly used. This applies if goods that “others” produced by using the invention easily lead to the identification of the invention as the source of the goods.

“In this country” means in the U.S. only, *not* a WTO or NAFTA country.

To overcome this rejection, the applicant may:

-) Argue that the claimed invention is patentably distinguishable from the prior art; or
-) Amend the claims to patentably distinguish them from the prior art; or
-) Establish a right for priority based on a parent application, a provisional application, or a foreign application to predate the prior art reference; or
-) File an affidavit/declaration under 37 CFR 1.131 to “swear back” the invention before the reference; or
-) File an affidavit/declaration under 37 CFR 1.132 showing that the publication is not “by others”; or
-) Add the author of the publication as an inventor, if he contributed to the invention.

35 USC 102(b)

“The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.”

An invention is unpatentable if it was:

-) Patented, described in a publication, in public use, or sold in the U.S. over a year before the application was filed in the U.S.; or
-) Patented or described in a publication in a foreign country over a year before the application was filed in the U.S.

“Public use” means any use of the device that informs the public of the existence and workings of the invention. The public use must take place in America.

Examples that constitute “public use”:

- The private use of an invention to produce a publicly sold good where an inspection of the good leads the public to conclude that the invention must have been used in its production.
- Allowing another to use the invention without an obligation of secrecy.
- The public demonstration of a prototype model.

Examples that do not constitute “public use”:

- Use of the invention within a reasonable expectation of privacy.
- Use of the invention in an experimental sense, aimed at the development of the product. Note that “market testing” may violate this or the “on sale” bar. Experimentation ends when the device has been fully reduced to practice. The “experimentation” exception is strengthened by evidence that the nature of the invention required public testing, the testing was conducted under the inventor’s supervision and control, the inventor regularly inspected and adjusted the invention during testing, or the existence of a doctor-patient relationship.

“On sale” means the invention has been the product of commercial exploitation. The exploitation must take place in America.

Examples that constitute “on sale”:

- The sale, conditional sale, or offer to sell the complete, working invention.
- The nonprofit sale of the complete, working invention.
- The sale of a working prototype.
- Any attempt to penetrate the market or attract consumer attention, including advertising.
- The display of samples to prospective customers.
- The demonstration of a prototype model where customers are charged to watch the invention work.

Examples that do not constitute “on sale”:

- A sale of the rights to an invention (or patent.)
- The “sale” of an invention from one part of an entity to another part of the same entity.
- The sale of a good made by an invention where the invention is kept secret.

“In this country” means in the U.S. only, *not* a WTO or NAFTA country.

To overcome this rejection, the applicant may:

-) Argue that the claimed invention is patentably distinguishable from the prior art;
or
-) Amend the claims to patentably distinguish them from the prior art; or
-) Establish a right for priority based on a parent application, a provisional application, or a foreign application to predate the prior art reference.

35 USC 102(c)

“The inventor has abandoned the invention.”

An invention is unpatentable if the inventor has abandoned the invention.

Abandonment, for this section, means an intentional act by the inventor; doubts will be resolved in his favor. A delay in applying or reapplying for a patent is not a sufficient indicator of abandonment (but this is a relevant factor in interference actions and priority disputes between applicants.)

To overcome this rejection, the applicant may:

-) File a 37 CFR 1.132 affidavit/declaration showing that the invention has not been abandoned.

35 USC 102(d)

“The invention was first patented or caused to be patented, or was the subject of an inventor’s certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor’s certificate filed more than twelve months before the filing of the application in the United States.”

If the applicant files for a patent in a foreign country, he must file a U.S. application for the same invention before the later of 12 months from the foreign application’s filing date, or the issue of the foreign patent. Otherwise, the foreign patent will bar the U.S. application.

To overcome this rejection, the applicant may:

-) Argue that the claimed invention is patentably distinguishable from the invention in the foreign patent; or
-) Amend the claims to patentably distinguish them from the invention in the foreign patent.

35 USC 102(e)

“The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the application for patent, or on an international application by another who has fulfilled the requirements of paragraphs

(1), (2), and (4) of section 371(c) of this title before the invention thereof by applicant for patent.”

When a U.S. patent issues, it retroactively bars all claims for the same invention in applications filed after the effective filing date of the patent. Note that the patent need not claim the invention for this bar to apply.

If an earlier application that claims the same invention is copending with this application:

- If there’s an inventive overlap, the examiner will make a provisional rejection of the claims in both applications. If one application becomes allowable but for the provisional application, it is allowed and the provisional rejections in the other application become double patenting rejections. If one application becomes abandoned, the provisional rejections in the other application are withdrawn.
- If there is no inventive overlap, provisional rejections can’t occur because of the PTO’s confidentiality rules. The examiner will decide whether an interference should be declared. If an interference isn’t declared, then prosecution continues until the application is otherwise allowable; then prosecution is suspended until the other application is abandoned (in which case this application issues) or is allowed (in which case this application is rejected.)

The earlier application’s effective date *does* take into account provisional and continuing applications, but *does not* take into account foreign applications. The later application, on the other hand, may benefit from a foreign right of priority in addition to a provisional or continuing application.

To overcome this rejection, the applicant may:

-) Argue that the claimed invention is patentably distinguishable from the prior art; or
-) Amend the claims to patentably distinguish them from the prior art; or
-) Establish a right for priority based on a parent application, a provisional application, or a foreign application to predate the prior art reference; or
-) File a 37 CFR 1.131 affidavit/declaration of prior invention to predate the prior art reference; or
-) If the subject matter was claimed in the patent and the reference is *only* available under 35 USC 103, file a 37 CFR 1.131 affidavit/declaration establishing common ownership and making a terminal disclaimer in this application; or
-) If the subject matter was not claimed in the patent, file a 37 CFR 1.132 affidavit/declaration that the subject matter does not belong “to another” – that he is the inventor of the subject matter.

35 USC 102(f)

“The inventor did not himself invent the subject matter sought to be patented.”

An invention is unpatentable if the inventor didn’t invent the claimed subject matter.

If someone else completely invented the invention and communicated that knowledge to the applicant, who then applied for a patent, this derivation will bar the applicant from applying for the patent.

To overcome this rejection, the applicant may:

-) File a 37 CFR 1.132 affidavit/declaration that he is the inventor of the invention, asserting that the “other” inventor derived his knowledge from the applicant; or
-) If the reference is available under 35 USC 103, file a 37 CFR 1.132 affidavit/declaration asserting common ownership of the prior art reference that suggests he didn’t invent this invention.

35 USC 102(g)

“Before the applicant’s invention thereof the invention was made in this country by another who has not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.”

An invention is unpatentable if someone else invented the invention before the applicant and hasn’t abandoned, suppressed, or concealed it.

This section forms the basis of interference practice., which is a determination of priority when two inventors claim the same invention. See the section on Interference Proceedings, below.

“In this country” *does not* just mean the U.S. The invention may have been made in any WTO or NAFTA country for this bar to apply.

“Abandonment” for this section requires a pretty strong showing. If the earlier inventor hasn’t used the invention, filed an application on it, etc., then these requirements are met. A 1-year delay in filing an application is *not* enough to find abandonment. If the earlier inventor abandoned the invention but renewed his interest in it, this bar still applies.

To overcome this rejection, the applicant may:

-) Argue that the claimed invention is patentably distinguishable from the prior art; or
-) Amend the claims to patentably distinguish them from the prior art; or
-) Provoke an interference; or
-) If the reference is available under 35 USC 103, file a 37 CFR 1.132 affidavit/declaration asserting common ownership of the prior art reference that suggests he didn’t invent this invention.

35 USC 103: Obviousness

To be patentable, an invention can't be a simple and apparent modification of what was known in the art before the applicant invented it. The three basic criteria of obviousness are:

- 0) The prior art must have taught *all* parts, features, and limitations of the claimed invention; and
- 0) The prior art must have taught some suggestion or motivation for combining the known inventions to form the applicant's invention; and
- 0) The prior art must have taught a good expectation of success from the combination. The prior art should also show that the combination provided an advantage in some way.

The prior art should also have taught that the combination provided some advantage. All of these criteria must have been taught at the time the invention was made.

The motivation to combine the teachings may be suggested by a reference, common knowledge in the art, a legal precedent, or scientific principles.

Under *Graham v. John Deere*, an obviousness determination consists of:

- 2) Researching the prior art;
- 2) Comparing the prior art with the claimed invention and determining the differences;
- 2) Establishing the level of "ordinary skill" in the art;
- 2) Deciding if someone of "ordinary skill" would have made these changes.

Two types of considerations may be used to rebut a finding of obviousness. Primary factors include:

- The modification rendered the prior art unsatisfactory for its intended purpose.
- Teachings in the prior art conflict; one *plausibly* discredits the suggestion by another that the modification may be successful.
- The proposed modification changes the operative principle of an invention.
- The results of the combination or modification could not be predicted.
- The prior art teaches away from the invention.

Secondary factors include:

- The invention shows results that one of "ordinary skill" would not expect.
- The invention has a property that one of "ordinary skill" would not expect it to have.
- The invention lacks a property that one of "ordinary skill" would expect it to have.
- The applicant has been commercially successful because of the invention.
- The invention satisfies a long-felt, unsatisfied need in the industry.
- Experts in the field believed that the invention would not work.
- Competitors have copied the invention.
- The other embodiments taught in the art were inoperative, but the invention is operative.

All of these determinations must be made in the light of what was known in the art at the time the application was filed.

The following inventions are non-obvious and patentable:

- A claim for a composition for which a method of making it was previously unknown.
- A method claim for using a previously known composition for a new purpose.

The following inventions are obvious and non-patentable:

- A modification suggested in the prior art for one advantage, which the applicant claims to have invented for a different advantage.
- Purely aesthetic changes without functional value.
- The removal of an element from the prior art that was unnecessary. (However, if an essential element is removed but the invention retains its function, this modification *is* non-obvious.)
- The addition of a nonfunctional element.
- An invention that was previously known, but economically infeasible.
- A nonfunctional change in shape, size, or proportion.
- A nonfunctional change in the order of steps taken in a process.
- A nonfunctional reversal, duplication, or rearrangement of parts.
- Making a prior invention portable, integral, separable, adjustable, or continuous.
- Purification of a previously known composition (unless the purified composition possesses previously unknown qualities, or a suitable method of purification was previously unknown.)
- The claiming of a range (e.g., a process carried out at pH between 7 and 10), where a prior art teaches an example overlapped by or included in the range.
- Discovery of the optimal point of a factor within a previously known range of acceptable values, unless the optimal point is critical for some reason (e.g., running the reaction and pH 8.6 has unexpected results.)
- The combination of two previously known inventions that achieve the same purpose into one invention that also achieves the same purpose.
- The substitution of a material in a previously known invention with another material that the prior art recognized as equivalently suitable for use in the invention.
- An invention that is structurally similar to a known invention that is expected to produce, and actually produces, similar results. In chemistry, positional isomers (moving around a few groups with nonfunctional results) are obvious, but structural isomers (substantial rearrangement) are not.
- A compound that is already known and useful for a different purpose. (But note that a method claim of using the known compound may be patentable.)
- *Inherency*: A claim for a newly discovered property of a known composition, machine, etc. A known composition, machine, etc. is assumed to be known for all properties and purposes inherent in it.
- A claim for a genus that includes a species previously known in the prior art.
- A claim for a species that is included in a genus previously known in the prior art.

- A claim for a species that fits within a previously known chemical formula, where the species “can be at once envisaged” by the formula.
 - Note that in all three of these cases, if the reference is available only under 35 USC 102(a) or (e), the applicant may be able to disqualify it by showing prior invention of the claimed genus or species under 37 CFR 1.131. If the reference cites several species, the applicant must show prior invention of all of them to claim the genus. If, however, the reference only shows one or several *embodiments*, and opposed to species, it may be overcome by showing prior invention of any one embodiment. If the applicant shows prior invention of a species to support a claim to a genus, the examiner may call into question the predictability of the species to the genus and question whether the invention of the species dispositively shows that the applicant was in prior possession of the entire genus. The applicant may overcome this question by showing prior possession of several species to demonstrate this.
- *Equivalents*: A claim in means-plus-function format is described so broadly that it includes an equivalent prior art element for the same purpose. Factors in determining equivalency include:
 - Whether the prior art element and the claimed element “perform substantially the same function in substantially the same way to reach substantially the same result.”
 - Whether a person of ordinary skill in the art would recognize the claimed element to be interchangeable with the prior art element.
 - Whether the only differences between the prior art reference and the claimed element are insubstantial.

A means-plus-function claim that is rejected because it is too broad and includes an equivalent may be made allowable if amended to exclude the equivalent.

35 USC 103 covers obviousness:

35 USC 103(a)

“A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, 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.”

An invention is unpatentable if it’s obvious, as defined above, in light of prior art references. Any references that could be used against the application for purposes of anticipation (as set forth in 35 USC 102) are available for use against it for purposes of obviousness – the exception is described in 35 USC 103(c) below. Any arguments against an obviousness determination must be supported by evidence contesting the examiner’s reasoning.

35 USC 103(b)

“A biotechnological process using or resulting in a composition of matter that is novel under section 102 and nonobvious under subsection (a) of this section shall be considered nonobvious if (A) claims to the process and the composition of matter are contained in either the same application for patent or in separate applications having the same effective filing date; and (B) the composition of matter, and the process at the time it was invented, were owned by the same person or subject to an obligation of assignment to the same person.”

An application for a composition of matter made by a biotech process will render the process of making it patentable if both inventions were commonly owned when the composition was invented. The inventions must be claimed in the same application or in two applications filed on the same date. The applicant must expressly request to proceed under this section. If the application that only contains claims to the composition, the applicant may petition, before payment of the issue fee or filing of an appellate brief, to add claims to the process under this section.

Inventions covered by this section include genetic alterations and cell lines with new features.

35 USC 103(c)

“Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.”

References are usually available for an obvious analysis if 35 USC 102 makes them available for an anticipation analysis. The exception to this is that a reference can't be used as the basis for an obviousness rejection if:

- 6) At the time the invention claimed in the application was made, the owner of the invention also owned an invention described in a patent; and
- 6) The patent qualifies as prior art only under 102(f) or 102(g).

To take advantage of this rule, the applicant must file an affidavit/declaration under 37 CFR 1.132 showing common ownership (see below.)

35 USC 112: Sufficient Disclosure and Specificity in Claims

35 USC 112 includes two basic requirements of patent applications:

- Paragraph 1 requires the disclosure to be sufficient to support the claims. The disclosure must teach the invention with such detail and clarity that one of “ordinary skill in the art” could use it without undue experimentation.
- Paragraph 2 requires the claims to be drawn specifically to the claimed subject matter and must set out the “metes and bounds” of the claims.

If the examiner makes a rejection for non-enablement of an application for a biological composition, the applicant may be able to overcome the rejection by filing a biological sample. See the appropriate section on biological deposits, above.

Double Patenting Rejection

The same invention may not be claimed in more than one patent. When an examiner determines that the subject matter of an application is claimed in another patent or application, he will determine whether common ownership exists. If no common ownership exists, the examiner may declare an interference (see below), but if common ownership exists, the examiner will make a double patenting rejection. A good indicator of double patenting is whether an embodiment that infringes the application must necessarily infringe the other application or patent; if not, a double patenting rejection is inappropriate.

Two types of double patenting exist:

- “Statutory” double patenting, when the applicant claims the same invention twice. This derives from 35 USC 101.
- “Nonstatutory” double patenting, when the applicant claims an obvious modification of an invention he has already patented. This derives from doctrine and court decisions.

If a double patenting problem arises between two copending applications, the examiner should make a provisional rejection in each application; if one application becomes otherwise allowable, it will be allowed and the provisional rejections in the other application will be made final rejections.

Restriction Requirement

Every application for patent must be directed to one invention. The examination and prosecution of an application claiming independent or distinct inventions is burdensome. In such cases, the applicant must elect one invention and remove all claims to the rest, which may be separately claimed in divisional applications.

35 USC 121 permits an examiner to make a restriction requirement when more than one independent or distinct invention is claimed in a single application. Two exceptions to this rule apply:

- Several species may be claimed in one application if these claims depend on a claim for a genus. Without the genus claim, however, the species are independent. If the species are not related, they may not be claimed together. In all cases where a genus is claimed, the applicant should provisionally elect one species for prosecution should the genus claim be rejected.
- If a product and its method of production are not distinct, then they may be claimed with the process of using it; but if they are distinct, the process of making, the product, and the process of using must all be claimed in separate applications.

A restriction requirement must always describe the independent or distinct inventions that the applicant may elect, and set forth the basis for insisting on the restriction. The basis may be that:

- D) The inventions are independent, or
- D) The inventions are distinct enough to require different fields of search, or
- D) The inventions are recognized in the art as belonging to separate subjects.

“Independent” means that the inventions are patentably different in design, operation, or effect. Examples of inventions that are *not* independent and may be claimed together include:

- A process and an apparatus that performs the process may be claimed together.
- A combination and a subcombination may be claimed together.
- A composition and the process of using the composition may be claimed together.
- A process and the product of the process.
- A Markush group claiming elements that share a common utility and a substantially similar and essential structural feature. Questionable Markush groups may draw a provisional restriction requirement, requiring the applicant to make a provisional election; if the Markush group is found invalid and rejected, the restriction requirement becomes effective and the application is restricted to the elected invention.

“Distinct” means that even though two inventions share a dependent relationship, they can be used separately. Distinctiveness may be “one-way” (only one invention is patentable over the other) or “two-way” (both inventions are patentable over each other.) Different nucleotide sequences are presumed to be distinct inventions, since they normally code for structurally distinct proteins. However, to avoid unnecessary multiplicity of patents, biotech patents may claim up to 10 distinct sequences, and their indistinct analogues, in one application.

An examiner may require restriction in one of two ways:

- Telephone restriction practice: The examiner will call the representative of record to determine which invention will be elected. The representative may make an election without traverse, make an election with traverse, or refuse to make an election. If an election is made, the examiner records the election, the traverse or lack of traverse, and any other substantive matter. If the examiner denies the traverse made over the telephone, the applicant may make another traverse in the next reply and set forth the reasoning; a denial of this traverse is petitionable to the Commissioner. The traverse must be made in order to preserve the right to petition.
- Written restriction practice: If the examiner chooses not to conduct telephone restriction practice, or if the applicant refuses to make an election over the telephone, the examiner may notify the applicant in writing of the restriction requirement and give him one month to make an election. When the applicant makes an election, the examiner will record the restriction.

Applicant's Reply

In reply to an examiner's (non-final) rejection, the applicant may take any or several of the following actions:

- Amending the claim to make it patentable.
- Requesting a reconsideration and making an argument that the basis for the examiner's rejection doesn't apply to the claim (or that an amendment to the claim makes it patentable.)
- Filing an affidavit as evidence to introduce new evidence that defeats the examiner's basis for rejection.
- Cancelling the claim if it can't be made patentable.

The applicant's reply must act on every grounds for objection or rejection made by the examiner, or it will be considered incomplete.

If the applicant's actions overcome all grounds for rejection, the examiner will allow it; but if the applicant hasn't overcome all grounds for rejection and hasn't cancelled the claim, the examiner will restate those grounds for rejection that still apply and issue a final rejection. The applicant may then cancel the claim, amend it again to correct the problems, amend it to place it in good order for grounds for appeal, appeal the decision of the examiner to the Board, or abandon the application (either expressly or by taking no action.) If the applicant amends the claims in response to the examiner's rejection, the examiner will issue an Advisory Action notifying the applicant of the allowability of the claim or the continued basis for rejection.

Amendments

The specification and claims may be amended as described below.

Amendments offered after the filing date of the application may not introduce new subject matter into the application; such amendments will normally be entered, but the examiner will object to additions to the specification and reject claims depending on new subject matter in the next office action. Amendments that do not introduce new subject matter include:

- Rephrasing that does not change the original meaning of the phrase.
- Additions of definitions, where the appellant's original use of the term clearly complies with the definition being added.
- Correction of obvious errors, where one of "ordinary skill in the art" would have recognized the error and understood the intended meaning.
- A more detailed explanation of a device referenced in the original application, especially if the structure or function of the device is implied but the applicant wishes to state it explicitly.
- The addition of information that the original application incorporated by reference.

The procedure for amending is set forth as follows. All amendments must be signed by the representative or all current owners.

- **Specification:** The applicant may amend the specification only by listing the directions for making the changes. (e.g., “Insert ‘w’ before ‘x’ on page y, line z; delete phrase ‘a b c’ on page d, line e.”) For a reissue application, the applicant may direct that an entire paragraph be deleted, or an entire paragraph may be presented for insertion with additions underlined and deletions listed in square brackets.
- **Claims:** The applicant may amend the claims by deleting or inserting no more than 5 words. A claim amended this way should indicate “(amended once)”, or however many times it’s been amended, after the claim number. The claim may also be cancelled and introduced in rewritten form. For a reissue application, the 5-word rule does not apply; the claim may be wholly rewritten with additions underlined and deletions listed in square brackets. If the claims are broadened by the amendment to claim subject matter previously disclosed but unclaimed, the inventors must file a supplemental oath/declaration to cover the newly claimed subject matter.
- **Drawings:** Drawings may not be amended; substitutes must be submitted. Substitutes that include subject matter not part of the original disclosure will not be accepted. Usually, substitutes will only be admitted after a draft showing the changes to be made in red ink has been approved by the examiner (such changes must be proposed separately, under separate cover of letter, from proposed changes to the specification.) However, if a few minor changes in form exist, the examiner may direct the applicant to make the changes by marking up the current drawing with pencil, in which case no sketch is necessary. Examples include:
 - Adding up to three reference characters or exponents.
 - Changing up to two numerals or figure ordinals.
 - Removing superfluous matter.
 - Adding or reversing directional arrows.
 - Changing Roman numerals to Arabic numerals.
 - Adding section lines or brackets.
 - Changing lead lines.
 - Correcting legend misspellings.
- **Oath/specification:** An oath/specification may not be amended; a substitute must be filed.

The policies for accepting amendments depend on its time of filing:

- **As part of the original disclosure:** An amendment filed on the date the application is filed may be considered part of the original disclosure and may add new subject matter. If an oath/declaration is also filed with the application, it must refer to the amendment; otherwise, the applicant must petition to file a substitute oath/declaration that does, or else the amendment will draw a new matter objection. *Minor exception:* If applicant files an amendment with a CIP and relies on the oath/declaration filed in the parent application, he may submit a substitute oath/declaration without petition.

- Preliminary amendment: A preliminary amendment may be filed as of right before the first office action.
- In response to office action: The applicant has the right to file an amendment of the specification and/or claims in response to an office action, but the applicant must also request reexamination of the application, pointing out the errors in the examiner's grounds for rejection and/or showing how the amendments make the claims patentable.
- After final rejection: After a final rejection, an amendment is no longer a matter of right. However, if the examiner's final action and an applicant's amendment cross in the mail, the amendments will be accepted and the examiner must file a supplemental action. Otherwise, the amendment must be approved by the examiner. An amendment will normally be approved if it puts the claim in better form for appeal or corrects an objection to form. An amendment to the merits of the claims must be submitted with a showing of necessity and the reason it wasn't presented earlier in the prosecution. In response to an amendment after final rejection, the examiner will issue an Advisory Action indicating whether or not the amendment was accepted and the effect of the amendment on the allowability of the application. If the applicant files the amendment within 2 months of the final rejection, the reply period is extended to the later of 3 months or the mailing of the Advisory Action. An amendment won't stay abandonment; if the application still isn't allowable, the applicant must appeal to prevent abandonment.

An amendment filed after final rejection will be given expedited consideration by the examiner if the applicant:

- 8) Marks the envelope "Box AF" in the lower left-hand corner with a bright marker, and
 - 8) Writes "Reply under 37 CFR 1.116 – Expedited Procedure – Examining Group (#)" in the upper right-hand corner of the reply.
- After notice of allowance: Amendments to form will normally be admitted after a notice of allowance has been mailed. Amendments to the merits of the application are normally not permitted (*Ex parte* Quayle) and will only be accepted if accompanied with a petition and fee showing the necessity of the amendment and the reason for not making the amendment sooner, and requires the examiner's approval. If the amendment was received in the PTO before the examiner mailed the notice, it's entered as of right, but if the amendment requires reopening prosecution, the application is withdrawn from issue.
 - After payment of issue fee: Amendments after payment of the issue fee will only be allowed if accompanied by the petition showing cause described above, and if approved by the Group Director.

- After reissue: Amendments to reissue applications that expand the scope of the claims will only be allowed within the first 2 years of the term of the patent.

In addition to the above procedures, the following types of amendments will not normally be accepted:

- An amendment presenting an unpatentable claim, or a claim worded such that it can't be entered with certain accuracy.
- An amendment requiring a new search, where all of the claims have all been allowed and/or finally rejected.
- An amendment canceling all of the claims and presenting no new claims.
- An amendment adding claims in excess of those paid for, but not submitted with the required fee.

Affidavits for Traversing Rejections

Affidavits or declarations filed in the prosecution of an application must be signed. If the affidavit/declaration is directed to the entire application, all of the inventors must sign it. If the affidavit/declaration is directed to only a few claims or some subject matter, only the inventors that contributed to the subject matter must sign it (but the affidavit/declaration must state this.) If the inventors are unavailable/uncooperative, the affidavit/declaration may be signed by all of the owners of the application.

As with an oath, an affidavit is a statement sworn before a public official; and as with a declaration filed in lieu of an oath, a declaration filed in lieu of an affidavit must include a statement acknowledging the penalties for fraudulent statements.

37 CFR 1.130

This rule lets patentees extend patent protection to obvious modifications of their invention (but this extra protection only lasts for the term of the original patent.) If a patent available only under 35 USC 102(a) or (e) is cited against the application as an obvious precursor, the applicant may disqualify the reference by showing that he owns the patent, but he must file a terminal disclaimer in the application. The requirements of this rule are as follows:

- 1) The reference is available only under 35 USC 102(a) or 35 USC 102(e); and
- 1) The cited reference is a U.S. patent that is not identical to, but an obvious modification of, the claimed invention; and
- 1) The applicant files an affidavit/declaration that the patent and the application are commonly owned by him; and
- 1) The applicant files an affidavit/declaration that he made the claimed invention prior to the effective date of the patent. For a U.S. patent, the effective date is the date of filing the application, except:
 - For a domestic patent claiming the priority of a foreign patent, the effective date is the date of filing the domestic patent (the foreign patent is *irrelevant*.)
 - For a PCT application, the effective date is the date the international application was filed.

- For a patent relying on the benefit of a provisional application, the effective date is the filing date of the provisional application.
- 1) The applicant must file a terminal disclaimer, surrendering the portion of the application that extends beyond the expiration of the term of the patent.

37 CFR 1.131

This rule lets an applicant avoid a prior art reference of an invention by showing he invented it before the reference. If all of the following requirements are met, a reference used by an examiner in an anticipation or obviousness rejection that is available under 35 USC 102(a) or (e) may be disqualified by filing an affidavit/declaration under this section.

The following requirements must be satisfied:

- 2) A rejection has been made on a reference available only under 35 USC 102(a) or 35 USC 102(e); and
 - 2) The cited reference is:
 - A U.S. patent issued that discloses, but does not claim, the applicant's invention, or
 - A foreign patent, or
 - A printed publication; and
 - 2) The application was filed less than 1 year before the effective date of the reference:
 - For a U.S. patent, the effective date is the date of filing the application, except:
 -) For a domestic patent claiming the priority of a foreign patent, the effective date is the date of filing the domestic patent (the foreign patent is *irrelevant*); or
 -) For a PCT application, the effective date is the date the international application was filed; or
 -) For a patent relying on the benefit of a provisional application, the effective date is the filing date of the provisional application.
 - For a foreign patent, the effective date is the date of publication.
 - For a printed publication, the effective date is the date of publication.
- and
- 2) The applicant's invention was made in the U.S., or in a NAFTA country or a WTO country; and
 - 2) The applicant can provide facts to establish that:
 - B) The invention was reduced to practice before the effective date of the reference, or
 - B) The invention was conceived before the effective date of the reference and due diligence can be shown in actually reducing the invention to practice, or
 - B) The invention was conceived before the effective date of the reference and due diligence can be shown in constructively reducing the invention to practice by filing a patent application.

This must be demonstrated by *facts*: reproductions of notebook entries, witness accounts, blueprints, photographs, testimony given in an interference proceeding, etc.

A few notes on 37 CFR 1.131 affidavits:

- A 37 CFR 1.131 affidavit must be submitted prior to a final rejection or an appeal.
- If the invention was made in a NAFTA country, the invention can't be predated to any time before December 8, 1993; or if the invention was made in a WTO country, it can't be predated to any time before January 1, 1996.
- If the examiner is relying on a combination of references in an obviousness rejection, the applicant need only predate *one* of them to be effective.
- If the application claims a genus, the applicant can disqualify references under this section by predating the invention of a single species.
- If the application claims a species, the applicant can disqualify references under this section by predating the invention of this species *or* of a species for which the modification to the claimed species would have been obvious.

37 CFR 1.132

This rule permits the applicant to file an affidavit/declaration for several different reasons to show that the examiner's basis for a rejection is incorrect. This affidavit/declaration must be presented before final rejection or appeal. An applicant may submit affidavits/declarations for traversing a rejection based on the following grounds:

- The invention is described but not claimed in a prior art reference.
- The invention is described in a foreign patent or a publication.
- The invention is already known in the prior art, according to the examiner's personal knowledge.
- The invention is lacking in utility.

An affidavit/declaration submitted under this section may evidence the following facts:

- The publication is not "by others." The examiner may cite a publication under 35 USC 102(a) only if it is "by others." This fact may be shown by *any* difference between the inventive entity and the authors of the publication. The applicant may disqualify the reference by showing that:
 - A) He is the owner/author of the reference.. Common ownership of both applications can be used to overcome this rejection. Four types of evidence may be used to show common ownership:
 - A) Assignment records that identify common ownership of both inventions, or
 - B) Unrecorded assignment documents that identify common ownership, or
 - C) An affidavit/declaration by the owner (or an officer of a corporate owner) that alleges common ownership, or
 - D) Other evidence of ownership.

or

- B) The author of the publication did not conceive the invention himself, but derived his knowledge solely from the inventors named in this application. Evidence supporting an affidavit/declaration to this effect includes:
-) A statement of the author in the publication crediting the inventors with the invention, or
 -) An affidavit/declaration by the author disclaiming his contribution to the invention, or
 -) Evidence that the author was a student under the inventors, etc.
- If the author *did* contribute to the invention, a rejection based on this reference may be avoided by adding the author as an inventor.

- The patent is co-owned and the reference is unavailable under 35 USC 103(c). The applicant must submit evidence that at the time the invention claimed in the application was invented, the applicant must have owned both the new invention and the old invention that is covered by the other patent or application. This is only available if the inventions are not identical.
- The disclosure is enabling. If the examiner claims the disclosure is non-enabling, the applicant must submit evidence that one of ordinary skill in the art could make and use the claimed invention without undue experimentation. An affidavit by one skilled in the art shouldn't just claim the disclosure is sufficient; he should explain how he would interpret the specification.
- Other considerations prove that the invention is non-obvious. If the examiner has rejected the application on the basis of obviousness, primary and secondary considerations suggesting the non-obviousness of the invention may be shown by evidence submitted under this section. These considerations must be supported by relevant, objective evidence of non-obviousness that shares some nexus with the claimed invention.

Examples of primary considerations include:

- The modification rendered the prior art unsatisfactory for its intended purpose.
- Teachings in the prior art conflict; one *plausibly* discredits the suggestion by another that the modification may be successful.
- The proposed modification changes the operative principle of an invention.
- The results of the combination or modification could not be predicted.
- The prior art teaches away from the invention.

Evidence of Secondary considerations should compare the invention with the closest existing prior art example, and show that the consideration applies to the claimed invention but not the prior art example. Examples of secondary considerations include:

- The invention shows unexpected results. If the application claims a range, the claimed range must be critical; i.e., the unexpected results must occur

throughout the range. However, the applicant need not show tests for every point in the range; evidence is sufficient if it leads one of ordinary skill in the art to conclude that the results occur throughout the range (e.g., if a trend is apparent.) The applicant should submit test results both inside and outside the claimed range.

- The invention has an unexpected property or lacks an expected property.
- The invention has experienced commercial success. Again, if a range is claimed, the entire range must be responsible for the commercial success. The evidence must show that the commercial success is particularly due to the claimed invention, not a result of market pressures, heavy advertising, etc. (For this reason, this type of evidence probably can't be shown for a design patent.) Gross sales figures are a bad indicator; market share is much better. If the claim is broad, the evidence must show the commercial success of all available examples. The country where the success occurred is irrelevant.
- The invention is a solution to a long-felt but unresolved need in the industry. The applicant may show that the industry suffered from a recognized, persistent, unsolved, long-felt need that is effectively satisfied by the claimed invention. The duration necessary to prove the need is "long-felt" is measured from the date the industry first recognized the need. This consideration is strengthened by evidence that others had tried, but failed, to satisfy the need, or that no one had tried because the problem was interesting or that others didn't perceive the potential or marketability of the solution.
- Experts in the art expressed skepticism that the claimed invention would function. This is *particularly strong* evidence of non-obviousness.
- Competitors are copying the claimed invention instead of using prior art examples. This type of evidence is strengthened if the competitors tried the prior art examples, but instead chose the applicant's claimed invention.
- The invention is operable, whereas the embodiments shown or taught in the prior art (including the references relied on by the examiner) are inoperative. This evidence must be a rather strong showing that one of "ordinary skill in the art" could not, without undue experimentation, produce the results from the prior art. If a reference is inoperative for certain features, it's still relevant for those features in which it *is* operative.

Other Utility Patent Prosecution Practices

Interview

During prosecution, the applicant may request an interview with the examiner to discuss the merits of an application. The request must include a statement of purpose for requesting the interview, describing the subject matter to be discussed. An interview may be granted after final rejection, and the examiner may even grant a second interview after final rejection if he's certain appeal issues can be clarified or the application can be made

allowable. In the case of minor, quickly discussed changes, an interview may not be necessary – the applicant should call the examiner directly for discussion.

Interviews will not be granted:

- Before the first office action, except for continuing and substitute applications.
- On non-business days, including Saturdays.
- After an appellate brief has been filed.
- With an unregistered, suspended, or disbarred attorney or agent, except to discuss his own applications for patents.
- With individuals whose credentials to prosecute are questionable. A power to inspect an application is insufficient to support a request for an interview, but a registered representative who's in possession of a copy of the application file may be sufficient.
- With individuals who lack the authority to make decisions binding on the applicant.

An interview cannot act as or take the place of a reply to an office action.

An interview may be conducted in one of three ways:

-) By personal appearance of the applicant and/or representative in the PTO, or
-) By remote videoconference (only if applicant uses facilities at the Patent and Trademark Deposit Libraries in Sunnyville, CA or the Great Lakes Patent and Trademark Center in Detroit, MI – must be arranged 3 days in advance), or
-) By telephone (must be placed through the Federal Telecommunications System.)

Interviews should last no longer than 30 minutes. The applicant may demonstrate a model of the invention, or may show a VHS tape of relevant subject matter (but use of video equipment must be requested 1 week in advance.)

The substance of the interview must be made of record. Unless the examiner agrees to do so, the applicant is responsible for filing a written account of the interview, including:

- A description of exhibits or demonstrations shown in the interview.
- Identification of claims discussed.
- Identification of prior art references discussed.
- Identification of substantial amendments discussed.
- A summary description of the arguments presented by the examiner and the interviewee.
- The general result or outcome of the interview.
- Any other pertinent subject matter.

If the examiner finds the applicant's account to be incorrect or incomplete, amendments to the record may be made within 1 month of filing the account. If the examiner and interviewee agree to amendments that would make the application allowable, the examiner may grant special status to the application.

Interference Proceedings

If an application claims subject matter also claimed in a copending application or a patent issued less than 1 year ago, and no common ownership exists, the examiner will declare an interference. The purpose of an interference is to determine who was the first inventor of the claimed invention.

The question to be resolved by an interference proceeding is which inventor is entitled to claim the invention. Two points on the inventive timelines of each inventor are considered:

- The date of conception. This is the date when the inventor conceived of every essential element of the invention.
- The date of reduction to practice. This may be the date of actual reduction to practice (the construction of a fully working model, including an appreciation of the invention and analysis of test results – need not be commercially viable) or constructive reduction to practice (the filing of a patent application for the invention – more specifically, the preparation of the disclosure.)

The rules of priority determination are thus for fictional inventors A and B:

- If A delayed an unreasonable amount of time between conception or actual reduction to practice and constructive reduction to practice, but B did not, B has priority.
- If A conceived the invention before B and reduced it to practice before B reduced it to practice, A has priority.
- If A conceived the invention before B but B reduced it to practice before A, and A can show due diligence in the invention from the time B conceived the invention to the time A reduced it to practice, A has priority. *Due diligence* means that not a single day passed when the invention wasn't being brought closer to construction or having a patent application filed *or* excusable neglect may be shown for not doing so.

If an examiner finds that an application claims subject matter that interferes with subject matter claimed by another in a copending application or recently granted patent, an interference will be declared. An interference will not be declared:

- Between two applications for a simple invention with filing dates more than three months apart.
- Between two applications for a complex invention with filing dates more than six months apart.
- Between two patents. At least one application must be in issue (can be a reissue application.)
- Between an application and a patent that qualifies as a prior art reference under 102(b) or 102(e).
- Before one application involved in the interference is in condition for allowance. An application that may be involved in an interference will be accorded special status to bring it to allowance more quickly.
- On claims in an application that are not supported by the disclosure.

An application cannot be allowed if it claims the same patentable invention as a patent, even if the patent does not qualify as prior art – an interference must be declared.

An interference may be initiated in two ways:

-) By an examiner. If the examiner becomes aware of an interfering application, but the present application discloses but does not claim the subject matter of the interference, and the applicant has expressed an intent to claim the subject matter, the examiner will suggest a claim to the applicant for addition to the application. If the applicant amends the application to add the *exact* claim suggested by the examiner within the time specified, the examiner will declare an interference. Prosecution of the application is then suspended until the examiner decides whether an interference should be declared; and if the application has been allowed, it will be withdrawn from issue when the applicant adds the interference claim. If the applicant does not add the suggested claim, he will be held to have disclaimed the invention.

or

-) By an applicant who wishes to “provoke” an interference. The applicant seeking to provoke an interference must:
 - 0) Suggest at least one count of interference; and
 - 0) Identify at least one claim in his application that falls within the count; and
 - 0) Identify the interfering application or patent; and
 - 0) Identify at least one claim in the other application or the patent that falls within the count; and
 - 0) Explain why an interference should be declared.

The applicant may amend the application to add a claim copied from another application or a patent, but the applicant must notify the examiner that the claim has been copied and identify its source. Otherwise, the examiner may take adverse action against the applicant.

In an interference between an application and a patent, the applicant bears the initial burden of proof. If the application was filed within 3 months of the filing date of the patent (including parent and provisional applications, but *not* foreign applications), the applicant must file a statement that a basis exists for granting priority to the application. If more than 3 months elapsed, the applicant must provide evidence setting forth a *prima facie* case before an interference will be declared. If the applicant fails to do this, the interfering claims may be rejected under 102(e).

An interference is declared when the examiner forwards the files to the Board along with a statement identifying the proposed counts, the claims of the applications or patents that correspond to the counts, the claims that do *not* correspond to the counts, and information supporting claims for earlier effective filing dates of each application or patent. The Board will then send a notice of declaration of interference, setting forth the relevant

material, to each applicant or patentee and to the PTO. The declaration of interference suspends prosecution of all involved applications.

Within 20 days of the declaration of an interference, the parties must notify the Board of any ownership interest that's not listed in the notice of interference. If common ownership exists, the declaration of interference will be withdrawn.

An interference may be resolved by a trial before the Board or through arbitration. The procedures for interference proceedings are lengthy and complex. The MPEP discusses the procedure for an interference proceeding in detail.

While an interference is pending, the public is not permitted to access the interference file. When the interference has terminated or an award of priority has been granted, the interference file is open to the public unless it only contains pending applications, and will then be opened when any one application issues as a patent or SIR.

An agreement between the parties to an interference must be filed with the PTO. At the request of any party, the agreement will be kept confidential and only made available on a showing of good cause. Interference agreements must be filed before termination of interference proceedings, or within six months of termination on a showing of good cause.

Public Use Proceedings

Any member of the public may file a petition to institute a public use proceeding. This is a determination of whether an invention claimed in an application was put on sale or in public use in the U.S. more than 1 year before the application was filed, and therefore is unpatentable under 35 USC 102(b). Two types of public use proceedings exist: *ex parte* (the petitioner is not permitted to inspect the application) and *inter partes* (the applicant is permitted to inspect the application – e.g., when the application is open to the public or is a reissue application.)

The petition must meet the following requirements:

- 4) The petition must be labeled “PETITION UNDER 37 CFR 1.292”; and
- 4) The petition must identify, if known, the applicant's name, the application number, the filing date of the application, the title of the application, the group art number, the name of the examiner inspecting the application, the status of the application, and the location of the application; and
- 4) The petition must contain a sufficient description of the subject matter the petitioner alleges was on sale or in use, and should include evidence of this; and
- 4) The petition must contain a list of any exhibits that demonstrate the sale or public use; and
- 4) The petition must be filed with the fee; and
- 4) The petition must be served on the applicant or filed with copies if service on the applicant has failed; and
- 4) The petition must be filed before notice of allowance is mailed on the application.

If the petition meets these requirements, the petition will be forwarded to the examiner, who will evaluate the petition and notify the Patent Legal Administrator of his impression of the petition. If the petition is granted, the Commissioner will hold a preliminary hearing to give the applicant an opportunity to show cause why the hearings are unnecessary. If the applicant fails to do so, the examiner will hold a public use hearing, using the format of an interference proceeding. The examiner will render a decision rejecting the application on 35 USC 102(b) or rejecting the petition and continuing prosecution. The petitioner may appeal a decision rejecting the petition to the Commissioner only in cases of clear error, but the applicant may appeal a decision rejecting the application to the Board.

Statutory Invention Registration (SIR)

A statutory invention registration is essentially a defensive patent: the applicant can't file infringement actions or seek compensation for the invention, but no one else can patent the invention.

An applicant may request conversion of a nonprovisional application to an SIR any time during its pendency. The applicant must file with the request:

- 3) A waiver of the right to receive a patent for the invention, and
- 3) A statement that the application complies with 35 USC 112 (the disclosure is enabling), and
- 3) A statement that the application complies with print standards of the PTO, and
- 3) The fee.

An examiner will review the request to ensure the satisfaction of these requirements. Before the examiner grants the request, it may be withdrawn. If the examiner grants the request, the application will be published in a registry of applications, without any examination of the patentability of the application. If the examiner refuses to grant the request, the applicant may appeal to the Board (if the refusal was based on a finding of non-enablement) or petition for reconsideration (if the refusal was based on any other reason.)

Protest

A member of the public that knows about an application may file a protest alleging fraud, unpatentability, insufficiency of disclosure, or any other matter relevant to patentability. The protest must be submitted before the mailing of a notice of allowance in the application. The protest must be served on the applicant, but if service can't be perfected, the protester must file duplicate copies of the protest with the PTO for this purpose.

A protest must contain:

- 2) An identification of the application number, or serial number and filing date, of the application; and
- 2) A listing of patents, publications, and other information forming the basis of the protest; and
- 2) A copy of each patent, publication, or other document; and
- 2) An English translation of all non-English documents provided; and
- 2) A concise explanation of each patent, publication, or other document; and

- 2) Proof of service on the applicant signed by the person served or the protester's representative (unless submitted anonymously.)

Documents supporting a protest need not qualify as prior art references; they may be any document containing information material to patentability. The protester may also submit a self-addressed, stamped postcard with the protest, and the PTO will return it as a receipt for the protest. No fee is associated with a protest.

Protests cannot be amended, so they must be complete on filing.

If the applicant has appointed a representative, service must be made on the representative; otherwise, service must be made on the applicant. Service may be made by:

- D) Delivering a copy of the protest in person; or
- D) Delivering a copy of the protest via first-class mail; or
- D) Leaving a copy at the person's place of business; or
- D) If the person has no place of business, leaving a copy at the person's home.

If service fails, the protester must file duplicate copies of the protest with the PTO for service on the applicant.

Protests may be filed anonymously. In this case, the protester must omit all indications of identity from the protest, and the proof of service must not be signed.

If complying with these requirements, the basis of a protest will be considered by the examiner in charge of the application. The examiner is required to consider each prior art reference raised in a protest. The examiner may request a reply by the applicant to the subject matter raised in the protest.

The protester may file more than one protest in any particular application, but subsequent protests must contain new prior art references; protests containing mere argument will not be considered.

Suspension of Examination

On petition by the applicant showing cause, or on request of the examiner or the government (usually occurs only in applications of national security interest, e.g., those covered by a secrecy order), the examination of an application may be suspended for up to 6 months. This measure is designed to suspend an examiner's action, not the applicant's prosecution; this measure has no bearing on a deadline for replying to an office action, and failure to do so will result in abandonment of the application.

Conclusion of Utility Patent Prosecution

Allowance and Issue of the Patent

When the examiner has determined that an application is allowable in substance, the application enters an *Ex parte Quayle* stage where the examiner and applicant cooperate

to eliminate objections to the form of the application. The examiner will review the entire application and, if necessary, request revision of the specification, drawings, and other parts of the application to conform to the claims as amended or cancelled. For the most obvious changes (*e.g.*, misspellings, grammatical errors, and inconsistent use of reference characters) the examiner will make the corrections in ink and initial the changes. An obviously nonstatutory claim (*e.g.*, an omnibus) may be cancelled by the examiner without the applicant's authorization; and a reference to a copending application that has since issued as a patent or been abandoned will be updated to reflect its status without the applicant's authorization. More substantive changes, such as cancellation or amendment of claims, may be made with the applicant's consent by a formal examiner's amendment.

The examiner may include in the file a statement of the reasons he is allowing the claim. The applicant may file a response to this statement.

Once an application is allowable in both substance and form, the examiner will mail a Notice of Allowance. This terminates the examiner's jurisdiction over the file. At this point, the applicant may take the following actions:

- B) Pay the issue fee within 3 months (non-extensible) of the mailing of the Notice of Allowance; or
- B) Petition (with fee) for a deferral of the issuance of the application and show cause why this is necessary. Deferral will last for a maximum of 1 month unless extraordinary circumstances exist. If the applicant owns several applications that are allowed and awaiting issue, he may request that all applications issue simultaneously; or
- B) Petition for the application to be withdrawn from allowance and show cause why this is necessary. The fee must be paid if the cause is not based on PTO error. After the issue fee is paid, an issued patent will only be withdrawn from issue in cases of:
 -) PTO error, or
 -) Illegality of the patent, or
 -) Unpatentability of 1 or more claims, or
 -) Inteference, or
 -) Abandonment for purposes of filing a continuing application with a new Information Disclosure Statement.

A patent will normally issue in the name of the applicant, unless the names of assignees are entered on the Issue Fee Transmittal Form. Errors in this must then be corrected by a certificate of correction (see below.)

Final Rejection

In the event of a final rejection, the applicant is given a 3-month shortened statutory period (extensible to 6 months) for taking action, or else the application is abandoned. If the applicant replies within the first 2 months, the deadline for taking additional action to avoid abandonment of the application is automatically extended until the earlier of six months or the mailing of the examiner's Advisory Action.

The following actions are available after a final rejection:

- The applicant may argue that the final rejection is premature. A final rejection should only be made after the applicant has been afforded an opportunity to respond to the grounds for rejection presented by an examiner for rejection. A final rejection that doesn't allow this is premature. The following circumstances suggest that a final rejection is premature:
 - In the first action by the examiner. The sole exception is where a claim in a continuing application is drawn from a parent application in which it was already finally rejected or would have drawn a final rejection in the examiner's next action.
 - If the examiner raises a new basis for the rejection.
 - If the examiner raises a new prior art reference to serve as the basis for the rejection.
- The applicant may amend the claims to avoid the examiner's basis for rejection. An amendment is not a matter of right after final rejection. If the amendment puts the application in condition for allowance (either by canceling all rejected claims or amending them to make them patentable), the amendment and application will be allowed. If the amendment does *not* put the rejected claims in condition for allowance, the amendment will not be allowed. In any case, the examiner will file an Advisory Action notifying the applicant of whether the amendment was entered and the effect it has had on the allowance of the application.
- The applicant may appeal the final rejection to the Board. The applicant may also amend the claims to put them in a better form for appeal – i.e., to address more accurately the examiner's basis for rejection.
- If other claims in the application are allowable, the applicant may cancel the rejected claims and accept a patent on those found allowable.
- The applicant may abandon the application and file a continuing application.
- For “transitional applications” (applications filed on or before June 8, 1995), the applicant may resubmit the application as a “first submission” by paying a fee. This automatically withdraws the final rejection and entitles the application to a reexamination. If the first submission is finally rejected, the applicant may resubmit the application as a “second submission” by paying another fee, again withdrawing the final rejection and requiring reexamination. Final rejection on a second submission operates as a regular final rejection; no further submissions are accepted. This is not available for design applications or , reissue applications.

In response to these actions, the examiner may issue an Advisory Action to notify the applicant if his actions have made the application allowable or if the grounds for rejection still stand. The examiner may withdraw the finality of the rejection in order to allow the claims, continue prosecution, or enter a new basis for rejection.

Appeal to the Board of Patent Appeals and Interferences

The Board of Patent Appeals and Interferences reviews discretionary decisions of examiners on the merits of patent applications. Matters of procedure, including those

forming the basis of an examiner's objection, should normally be petitioned to the Commissioner, and won't be heard by the Board.

Any claim that is rejected twice on the same grounds is appealable. The second rejection is usually final, but may not be – e.g., if a rejection of a claim in a parent application is renewed for the same claim in a continuing application. Also, any action in a reexamination proceeding that is adverse to patentability may be appealed to the Board.

A notice of appeal should identify the claims being appealed and should be signed by the applicants. The notice must be filed during the period set for the applicant's reply to the examiner's rejection.

The filing of a notice of appeal will stay abandonment of a finally rejected application, but *does not* immediately stay prosecution of the patent. Amendments on the application may still be filed as per the regular procedures. During continued prosecution, the examiner may reopen prosecution to allow the application or to enter a new grounds for rejection; this action automatically dismisses the appeal. The appellant may then abandon the appeal by filing a reply to the office action, or request reinstatement of the appeal accompanied by a supplemental appellate brief. Abandonment of the appeal for some rejected claims results in cancellation of the claims; abandonment of the appeal for *all* rejected claims operates as an abandonment of the application.

The Board will eventually take jurisdiction of the application (if no reply brief is filed, 2 months from the filing date of the examiner's answer brief; otherwise, after the examiner notifies the appellant that his reply brief has been received.) This *will* suspend prosecution of the patent, and no amendments or replies to office actions will be considered until the appeal is concluded or abandoned.

Appellate briefs

After filing a notice of appeal, the appellant must file an appellate brief within 2 months or before the end of the period set for the applicant's reply to the examiner's action (whichever is later); otherwise, the appeal is abandoned. The appellate brief must include the fee and include all grounds for appeal. The appellate brief should contain the following:

- 2) The name of the real party in interest.
- 2) A statement identifying related appeals and interference proceedings.
- 2) The current status of all claims in the application (pending, rejected, cancelled, or allowed.)
- 2) The status of amendments filed after a final rejection.
- 2) Summary of the claimed invention.
- 2) Summary of the issues for review.
- 2) Designation of which claims are affected by each issue for review.
- 2) Argument.
- 2) Appendix, including a copy of the claims being appealed.

The brief and every other document filed in the appeal should indicate the application or patent number and the number of the examining group. The brief should respond to all

grounds for rejection offered by the examiner. If the brief is defective or incomplete, it may be amended within 30 days of the mailing of a notice of noncompliance.

The examiner may file an answer brief to the appellate brief. If an answer brief is filed, the appellant may file a reply brief to the answer brief within two months of the filing date of the answer brief.

If the appeal is dismissed because the examiner reopened prosecution to enter a new grounds for rejection, the applicant may request reinstatement of the appeal and file a supplemental appellate brief on the new matters. The supplemental brief may incorporate the original appellate brief by reference. And, as with the original appellate brief, the examiner may file an answer brief, and the applicant may file a reply brief.

Oral hearing

The applicant should request an oral hearing by the Board only if it's really necessary for a proper appeal. A request for an oral hearing, including the fee, must be filed within 2 months of the filing date of the examiner's answer brief. The appellant may also request a certain date for the oral hearing, or alternately request to present his arguments to the Chief Clerk of the Board via telephone. If the Board grants the request, a notice of hearing specifying its date and time will be sent to the appellant; the appellant must confirm the hearing notice within the time specified on the notice, or else the hearing will not occur. The hearing date may be rescheduled on request, but this is discouraged. The appellant will normally be given 20 minutes to argue the merits of the appeal.

Board rulings

The Board will consider the briefs and oral hearing testimony. The Board may remand the application to the examiner to consider a newly filed amendment or affidavit/declaration; the examiner should consider the amendment or affidavit/declaration and return the application to the Board with a supplemental answer brief. The Board may require the applicant to respond to a particular issue. The applicant must respond in the specified time period or the appeal is abandoned.

Following this consideration, the Board will write an opinion and make an order affirming or reversing each rejection.

- 1) If the Board affirms some or all of the claims, the application should be allowed based on those claims.
- 2) If the Board rejects all independent claims and does not comment on the patentability of dependent claims, all claims are considered rejected and the application is abandoned. But if the Board rejects all independent claims but states that a dependent claim is allowable, the examiner should rewrite the dependent claim in independent form or allow the applicant 1 month to do so.
- 3) If the Board orders that a claim will be allowable if amended in a particular way, the examiner will be bound to allow the claim if the applicant amends it as directed.

- 4) If the Board's decision leaves room for further action (*e.g.*, the Board rejected a genus claim, but a species claim has been designated and no action has occurred on it), prosecution will be re-opened only for this limited purpose.
- 2) If the Board's decision raises a new basis for rejection, the applicant may:
 -) Amend the claims in response to the new grounds for rejection and submit the amendments to the examiner within 2 months for reconsideration (and newly appeal a subsequent rejection made solely on this new basis); or
 -) Request a rehearing to present evidence that will controvert the new basis for rejection. The request must be filed within 2 months of the decision and should set forth the points that Board overlooked or misapprehended; the request should not just be a retread of arguments already presented to the Board.

Judicial review of decisions of the Board

Decisions of the Board in appeals or interference actions may be appealed to the Court of Appeals for the Federal Circuit, or they may be presented as a civil suit against the Commissioner before the district court of Washington D.C. Appeals and/or civil actions must be filed within 2 months of the Board's decision; in an interference action, a cross-appeal may be filed by the other party within 2 months of the notice of appeal or 2 months of the board's decision (whichever is later.) The procedures for and after appeal to the Court of Appeals for the Federal Circuit are the same as for and after appeal to the Board.

Petition to the Commissioner

If the applicant disagrees with an examiner's objection (not a rejection that is appealable to the Board), he may petition the Commissioner for reconsideration. Usually, the applicant must have asked the examiner to reconsider the objection, and the examiner must have again asserted the objection. The petition must be filed within 2 months of the examiner's last objection. All petitions must include:

- 2) The petition fee, and
- 2) A statement of facts, and
- 2) Any necessary briefs, memoranda, or affidavits/declarations in support of the statement of facts.

Generally, an applicant may petition the Commissioner:

-) Whenever provided by the rules, or
-) To invoke the Commissioner's supervisory authority, or
-) For any matter that is not appealable to the Board.

Abandonment and Revival

Two types of abandonment exist: express and default.

Express abandonment

An express abandonment occurs when the applicant takes an affirmative action that abandons the application. An express abandonment may be filed with the PTO by filing a paper signed by:

-) The applicant/inventor, or

- B) A representative of record, or
- C) A representative “acting in a representative capacity” (not of record, but registered by appearance)– *but* only if a continuing application is filed on or before the abandonment.

Alternately, an express abandonment is implied when an applicant files a CPA or withdraws an appeal from a final rejection of all claims.

In order to abandon an application that’s the subject of a pending interference proceeding, the abandonment request *must* be signed by the applicant. If only signed by a representative, it will only be given effect after the interference proceedings have terminated.

An express abandonment must be filed prior to a default abandonment to be effective. The express abandonment becomes effective on the date a PTO official acts on it, but the PTO may set the date of abandonment retroactively (e.g., when it takes the PTO a few days to process a CPA request.)

An application can be abandoned after the issue fee only if authorized by the Commissioner, and only if

- A) A mistake occurred in the PTO, or
- B) The application is illegal, or
- C) The application is unpatentable, or
- D) For an interference, or
- E) To permit consideration of an IDS in a continuing application.

An application that has been expressly abandoned cannot be revived.

Default abandonment

Default abandonment occurs when an applicant fails to act within a statutory period, or if the action is incomplete. Default abandonment is assumed to be an intentional choice of the applicant unless he asserts otherwise. The petitioner may seek to have the abandonment nullified by taking one of three actions:

- A) The applicant may file a request with the examiner for a reconsideration of the holding of abandonment if he believes the holding was incorrect, either because:
 - A) The examiner incorrectly held that the response was incomplete, or
 - B) The examiner incorrectly calculated the statutory period and incorrectly held that a reply was not timely filed.

or

- B) The applicant may petition for revival if the holding was correct, but the delay was caused by an unintentional or unavoidable delay. The petition must be filed within 2 months and should be filed promptly after learning of the delay to avoid a finding that the delay has been intentional. The applicant must submit the following with the petition:

- 1) The fee (note that the petition fee for an “unavoidable” delay is \$78, but the petition fee for an “unintentional” delay is \$820), and
- 1) The overdue reply, if not already filed (may be a request for a CPA), and
- 1) A showing of why the delay was unavoidable or unintentional (an unintentional delay only needs to include a statement, but an unavoidable delay needs *actual proof* of the prohibitive factors), and
- 1) For design patent applications, or utility or plant patent applications filed before June 8, 1995, a terminal disclaimer surrendering a tail portion equivalent to the duration the application has been abandoned. If the applicant feels the terminal disclaimer is too long or unwarranted, he may file a separate petition for modification of the disclaimer; this will only be granted in “extraordinary situations” where “justice requires” modification.

or

- F) The applicant may petition the Commissioner for reversal of the holding of abandonment if:
 - C) The matter is not appealable to the board, or
 - C) The rules state that a petition to the Commissioner is acceptable, or
 - C) The supervisory power of the Commissioner is required.

The petition must be filed within 2 months of the holding of abandonment.

The abandonment of a provisional application can’t be revived at any time past the 12-month limitation period.

Prosecution of Design Patent Applications

A design application is examined for novelty, non-obviousness, and ornamentality, and the design must be embedded in an article of manufacture.

To be patentable, a design must be “primarily ornamental” and not functional in any way. The article must normally be visible during its ultimate end use or at the point of sale. A design must also be original; a design is not patentable if it simulates an existing object (either well-known, like a Ferrari, or natural, like a tree) or a person (either famous, like Michael Jordan, or generic, like a baby.) Designs deemed offensive are not patentable. Computer icons and fonts fulfill the requirements of an article of manufacture if the application states where the icon or font appears – *e.g.*, “icon on a computer screen,” or “font on a computer screen.”

The requirements of 35 USC 102 and 35 USC 103 apply to design patents, with the following changes:

- For purposes of priority under 102(d), the applicant may pre-date the reference by relying on a foreign design application, but time period in which the applicant must file the U.S. application is shortened from one year to six months from the

- date of filing the foreign application. The foreign application can be any kind of design registration – it need not be designated as a “patent” in the foreign country.
- The objectiveness standard in 102 is reduced from a person of “ordinary skill \in the art” standard to an “average observer” standard. The objectiveness standard in 103 is changed to that of a “designer of articles of the type presented.”
 - When the “on sale” bar under 102(b) applies, the applicant may not benefit from the “experimental use” exception.
 - “Obviousness” references under 103 may be combined, as in utility applications, if the analogous art is so closely related that an ornamental feature in one field is easily adapted for use as a design in the other field.

As with utility applications, the examiner bears the initial burden of making a *prima facie* case of unpatentability. Rejection may be made and overcome on the following grounds:

- Anticipation: An applicant may not receive more than one patent for the same design – any subsequent applications will draw a double patenting rejection.
- Obviousness: An obviousness rejection should focus on the overall appearance of the design, not any particular aspect. The applicant may use secondary considerations, like commercial success or copying by competitors, to overcome an obviousness rejection. However, features that are hidden during use or point of sale, or that are functional, may not be used to distinguish the design from an obvious prior art reference. If the obviousness rejection is made because the applicant has already received a design patent for an obvious modification of this design, the applicant may overcome the rejection by filing a terminal disclaimer.
- Lack of ornamentality: If the basis is lack of ornamentality, the applicant may provide evidence that the design was created with ornamentality in mind, not function, and/or that the design is visible during its ultimate end use or at the point of sale. Evidence may include affidavits/declarations and prior sketches of the drawing as evidence of intent.
- Non-enablement: A non-enablement rejection will be made if the title, specification, claims, and description do not fully describe the design. Surface areas not visible during use or sale need not be shown or described.

If a design is in multiple parts on one article, all parts may be claimed together as one design. However, the examiner may make a restriction requirement if the design application sets forth different “embodiments” (different articles of manufacture in which the design appears, in which case the inventions are independent), or if several versions of the design are claimed (in which case the inventions are distinct.)

Continuing and divisional applications can be filed on a design application for purposes of precluding a reference, unless the parent application was found fatally defective.

Prosecution of Plant Patent Applications

Plant patent applications undergo a cursory examination to ensure that the application complies with PTO rules. This really isn’t discussed in the MPEP.

Prosecution of International (PCT) Applications

Under the Patent Cooperation Treaty, patent rights may be obtained for the same invention in several countries. If the applicant files a foreign application for a patent or, in some cases, an inventor's certificate, and then files a U.S. application for the same invention (a "national stage application"), he may be able to obtain a "right of priority" that allows him to use the foreign application's filing date as the effective filing date for the U.S. application. A right of priority may be used to overcome a prior art reference or predate a competing application in an interference proceeding.

A PCT application occurs in several stages. All dates are relative to the priority filing date of the application.

- 0) The applicant files a PCT (international-stage) application with a Receiving Office, such as the USPTO. The application lists certain "designated countries" in which patent protection is sought. The application is sent to the International Bureau (IB).
- 0) At 13 months, the application is sent to an International Search Authority (ISA) to locate references, either patents or publications, that are relevant to the application. The search is confined to patents issued by and publications published in the designated countries. The ISA issues a search report (SR) listing the relevant references, but does not express an opinion on the patentability of the invention. The application and SR are sent back to the IB within 3 months of receipt (at 16 months.)
- 0) At 18 months, the IB publishes the application.
- 0) If the applicant has made a Demand for an international preliminary examination within 19 months, the application is forwarded to an International Preliminary Examination Authority (IPEA) at 20 months. The IPEA will consider the patentability of the application in light of the references disclosed in the SR. Some limited prosecution takes place. The IPEA will then issue an international preliminary examination report. The application and report are sent back to the ISA within 28 months.
- 0) At 20 months (if a Demand was not made) or 30 months (if a Demand was made), the ISA sends the application to every designated country. National-stage prosecution begins in each designated state.

Filing a PCT Application

A PCT application may be filed with any Receiving Office authorized to accept PCT applications, such as the USPTO. The application may be filed with the USPTO if:

- 0) The application is in English; and
- 0) At least one applicant is a U.S. national or resident; and
- 0) The application must indicate that it is intended to be an international application; and
- 0) The application must designate at least one PCT nation in the request; and

- 0) The application must name the applicant; and
- 0) The application must include a description with at least one claim, an abstract, and any necessary drawings.

Once all of these requirements are fulfilled and all essential parts filed, the application will be accorded a filing date. The fee may be paid within 1 month of filing; after 1 month, the fee may be paid with a surcharge; and after 2 months, the application is abandoned if the fee is unpaid. The designation fee must be paid within 12 months or 1 month of the date of receipt of the international application, whichever is later.

A foreign filing license may be required before the application is forwarded to a foreign patent office or the IB. Whereas a national patent application must specifically request a foreign filing license if a license wasn't granted automatically, a PCT application is assumed to include such a request; if not granted, the PTO will contact the applicant.

A PCT application may draw a secrecy order. If so, the application will not be forwarded to the IB until the order is withdrawn. If the order is not withdrawn within 12 months of filing, the PCT application will be considered abandoned.

The pages of a PCT must be numbered in four series: one for the request; one for the description, claims, and abstract; one for the drawings; and one for a sequence listing, if provided.

Express Mail services may be used for filing PCT applications and documents. Fax may be used according to the rules for faxing national applications. A certificate of mailing or transmission will not be honored. Proof of a delay or loss of mail can be used to overcome an adverse action based on a missed deadline if:

- 0) The response was mailed at least five days before the deadline, and
- 0) The document was sent by registered air mail or, when ground mail would normally arrived within 2 days, by registered ground mail.

All dates in a PCT application must be written as "day-month-year," as in "04-07-1776" for Independence Day.

The following rules apply to different parts of a PCT application:

Request

A PCT application must begin with a request, which specifically states that this is an international filed under the Patent Cooperation Treaty.

The request must indicate all prior national or international applications on which this PCT application relies for a right of priority. A PCT application may be a continuing or CIP application based on a national parent application. The PCT application may benefit from the national application for purposes of a filing date, but the PCT application must identify the copending national application. The reference may be added within 16 months of the claimed priority date, or may be changed before the earlier of 16 months from the priority date that *was* claimed and 16 months from the priority date that *should*

be claimed. At any time before 16 months, the priority request may be withdrawn in order to postpone application of the PCT; all subsequent deadlines will be calculated not from the priority filing date, but from the actual filing date of the PCT.

The request must designate at least 1 nation. Nations cannot be designated after the request is filed. A “precautionary designation” may be filed that designates *all* PCT nations, on condition that the nations the applicant really wishes to designate will be confirmed within 15 months of the priority date by filing written notice of confirmation with the PTO and paying the designation and confirmation fees. Any precautionary designations that are unconfirmed or unpaid at 15 months will be withdrawn. Some countries do not issue national-stage applications based on a PCT, but will honor a “European patent” covering several nations. If the applicant wishes to receive a European patent in a designated nation, this should be noted in the request. A designation may be withdrawn within 20 months of the priority filing date (30 months if an initial preliminary examination is made.)

The request must designate an ISA. Either the USPTO or the European Patent Office (EPO) may be specified.

The request must be signed by all applicants, but if one applicant is unavailable or uncooperative, the other applicants may make a statement to that effect. A representative may sign the request, but must also present a power of attorney signed by the applicant and indicate on the request who he represents. If the inventor is dead, his legal representative (heir, executor, etc.) may file on his behalf, but must provide proof of authority.

Description

The parts of a description include:

- 0) Title.
- 0) Technical field.
- 0) Background art.
- 0) Disclosure of the invention.
- 0) Brief description of the drawings.
- 0) Best mode for carrying out the invention.
- 0) Industrial applicability.

The description must disclose the invention in such detail that the technical problem and its solution may be understood. The advantageous effects of the invention must be asserted. The application may include a reference to deposited biological materials, and must include a sequence list if a nucleotide sequence is claimed.

Claims

Claims should be made as with national applications, and should be in Jepson form whenever possible.

Abstract

The abstract need not be filed with the application to receive a filing date, but must be submitted within 1 month of filing to avoid abandonment.

Drawings

Drawings must be included whenever necessary for a full disclosure of the invention.

International Search Authority

An application filed with the USPTO will be forwarded to the IB for processing. At 13 months after the priority date of a PCT application, the IB will forward the application to the International Search Authority (ISA) designated in the Request. The function of the ISA is to search the prior art in each designated country for all references that may be relevant to the PCT application. The ISA provides a search report (SR) listing these references, but will not issue an opinion on the patentability of the invention. Either the USPTO or the European Patent Office (EPO) may be designated as the ISA (note that the EPO will not search software inventions.)

In searching for prior art, the ISA must make a judgment about whether “unity of invention” exists. PCT applications must be drawn to one invention, and multiple inventions may only be claimed together if they share a “technical relationship.” The following inventions are assumed to share a technical relationship:

- **Combination of inventions:** The following combinations of inventions are assumed to share a technical relationship and may be claimed together:
 - A product, the process of making the product, and the process of using the product.
 - A product and a machine or method for carrying out the process of making the product.
 - A product, the process of making the product, and a machine or method for carrying out the process of making the product.
- **Markush practice:** Alternatives of chemical products may be claimed together as a Markush group when:
 - 0) All products have a common activity, and
 - 0) All products share a common structural element or belong to a recognized class of chemicals.
- **Intermediate and final products:** An intermediate created as a precursor for a final product may be claimed with the product if:
 - 0) The intermediate and final product have the same essential structural element (they share the same basic chemical structure, or the structures are closely related and they share an essential element); and
 - 0) The intermediate and final product are technically related: the final product is made directly from the intermediate, or indirectly with few intervening steps.

If the ISA determines that unity of invention is lacking, it cannot make a restriction requirement, but it may request additional fees to search for prior art for each independent invention. The applicant must pay the fee, but may file a protest claiming

that unity of invention exists; if the Group Director of the ISA agrees, the fee will be reimbursed.

The ISA will issue an SR and return the application to the IB within 3 months of its receipt of the application (16 months after filing.)

Publication of the International Application

The IB will publish the application 18 months after its priority filing date, or sooner if the applicant requests an earlier publication date. The publication will omit any drawings or descriptions considered immoral or disparaging. The publication date may be postponed if the applicant withdraws a right of priority; the application will then be published 18 months after the filing date of the PCT application.

International Preliminary Examination

If the applicant makes a Demand for an international preliminary examination within 19 months of the priority date, the application will be forwarded at 20 months after the priority filing date to the designated International Preliminary Examination Authority (IPEA). The following requirements apply to a Demand:

- The Demand must “elect” at least one country to serve as the basis for the examination. Any country designated in the Request and searched in the ISA may be elected. The applicant may elect new countries or withdraw elections for countries after filing the Demand within the first 19 months, but the withdrawal of all elected countries operates as a withdrawal of the Demand.
- The Demand must designate an International Preliminary Examination Authority (IPEA). If the EPO was selected as the ISA, the Demand may designate either the EPO or the USPTO as the IPEA; otherwise, the USPTO must be designated as the IPEA.
- The Demand must be signed using the same rules as signature of the Request.
- The fees for the Demand must be timely paid, or within 1 month of the payment deadline with an additional surcharge; otherwise, the Demand will be abandoned.

The PCT application may be amended once between the issuance of an ISA and the beginning of examination by an IPEA. The amendment is made by submitting a list of changes to be made for each page as well as a substitute for any application page changed by the amendment.

The preliminary examiner will conduct an examination. The examination will be limited to the references identified in the SR. He will issue a written opinion adverse to patentability if:

- He believes the invention lacks novelty, an inventive step, or industrial utility.
- He discovers a material defect in the form of application.
- He finds that any amendments to the application introduce new subject matter.
- He wishes to express an opinion on the clarity of an application or question whether the claim is supported by the specification.
- He cannot examine a claim because no SR was issued for it.

- He cannot examine a claim because a sequence listing hasn't been provided. The applicant may respond within 2 months with counterarguments and/or amendments (amendments are made according to the rules set forth above.) If necessary and sufficient time remains, the preliminary examiner may issue a second written opinion. The applicant is entitled to one interview as a matter of right, but the examiner may grant additional interviews. An interview may be held in person or by telephone, and the applicant is required to file a written record of the matters discussed and agreements reached.

Within 9 months of receipt of the application (by month 29), the preliminary examiner will issue an international preliminary examination report, stating his conclusions about the novelty, inventive step, and industrial applicability of the invention.

National Stage Application

At 20 months (30 months if a Demand was made), the IB will forward a copy of the application to each designated nation and national-stage prosecution will begin. For prosecution of a national stage application in the U.S., the applicant must ensure that the IB has forwarded a copy of the application; if not, he must supply a copy that indicates it's a national stage application. The applicant must also file the oath/declaration (including a statement identifying the application as a national stage application), the fee, and any necessary translations by the end of month 20 (or 30) or the national stage application is abandoned. These documents and payments may be Express Mailed, but fax, certificate of mailing, and certificate of transmission procedures are not permitted.

A national stage application is automatically accorded a filing date as of the actual filing date of the PCT application, and need not reference the PCT application to secure this filing date. However, the national stage application must reference any parent, provisional, or national or foreign application on which the PCT depended to secure a priority filing date. The IB will normally forward copies of these previous applications, but if not, the applicant must supply a certified copy of each previous application.

Inversely, a continuing national application may benefit from the filing date of either a national stage application or a PCT application that has not entered the national stage.

A national stage application is prosecuted just as a national application. The only substantive difference is that an examiner may not make a restriction requirement; he must follow "unity of invention" practice.

If a patent issues on the national stage application, its effective date for purposes of 102(e) is not the filing date of the PCT application, but the filing date of the national stage application. However, the IB publication (18 months after the priority filing date) may be used as a publication.

PART III: PATENT PRACTICES

A utility patent or a plant patent lasts for 20 years from the effective filing date of the application, including the benefit of a filing date of any parent application, but excluding the filing dates of provisional applications or rights of priority based on foreign patents. A design patent lasts for 14 years from its date of issue. The term may be extended if issuance was delayed by an interference proceeding, appellate review, or secrecy order, but no more than 5 years. The term may be shortened by the filing of a terminal disclaimer during or after prosecution.

Correction of Patents

A patent may be corrected in four ways: by reissue application, by a certificate of correction, by a disclaimer, and by reexamination.

Reissue Application

A patent may be corrected if an error has materially altered the scope of the patent or made it defective. The common grounds for filing a reissue application include:

- G) The claims are too narrow (but note that a reissue application seeking to expand the scope of the claims must be filed within 2 years of the issue date of the original patent); or
- G) The claims are too broad; or
- G) The disclosure contains inaccuracies; or
- G) The applicant failed to make a claim for a right of priority; or
- G) The applicant failed to make a reference to a parent or provisional application.

An error in inventorship cannot be corrected by a reissue application; the applicant should seek a certificate of correction.

A reissue application must be filed during the unexpired term of the patent. The filing of a reissue application does not alter the payment of maintenance fees for the original patent, and care should be taken that the original patent does not expire due to nonpayment of fees while the reissue application is pending.

A reissue application is filed in the same manner as an original application: by filing a specification, claims, any necessary drawings, the oath/declaration (must be a new oath/declaration), and the fee.

Specification

The specification submitted with the reissue application should be a reproduction of the patent specification, with additions underlined and deletions enclosed in brackets. Any changes previously made to the patent specification by a certificate of correction should just be included in the reissue specification, without underlining or brackets.

Claims

Claims may be added, up to the number already paid for, but claims in excess of that number will require a new fee. However, no claim may claim subject matter not disclosed in the original application.

The scope of the claims may only be expanded if the application is filed within 2 years of the issue date of the original application. A “broader” claim is larger in scope than each and every claim in the original application; the test is whether an infringing product could infringe the new claim without infringing the original patent claims. When the patentee succeeds in broadening the claims in a reissue application, and the patentee indicated in the oath/declaration of the reissue application that he intended to broaden the claims again, the patentee may again seek to broaden the claims within 2 years of the issue date of the last reissue application.

The “recapture rule” states that an applicant cannot reclaim subject matter deliberately cancelled or limited by amendment during prosecution of the application in order to receive the original patent. The recapture rule applies to bar the claim if:

- A) A reissue claim is as broad or broader than a claim that was cancelled or limited by amendment in all aspects; or
- B) A reissue claim is as broad or broader than the cancelled or limited claim in an aspect germane to a prior art rejection, but narrower in an unrelated aspect.

The recapture rule does not apply if:

- A) A reissue claim is narrower than the cancelled or limited claim in all aspects; or
- B) A reissue claim is narrower than the cancelled or limited claim in an aspect germane to a prior art rejection, but as broad or broader in an unrelated aspect.

A process claim may be added to a composition patent in a reissue application (but this broadens the scope of the claims, so it must be filed within 2 years.) Similarly, a claim for the manufacture of functionally descriptive material on computer-readable media may be added to a patent for a computer process or computer machine claim.

Drawings

Drawings filed in an original application may be transferred by request to a reissue application, but the applicant must file copies of the drawings with the reissue application. Corrections to drawings in a reissue application must be made as in a nonprovisional application (by submitting a sketch to the examiner, obtaining his approval, and filing a substitute drawing.)

Oath/declaration

In addition to the regular requirements, an oath/declaration filed in a reissue application must contain these additional statements:

- 1) The applicant believes that the original patent is wholly or partly inoperative due to a defective drawing or specification, or by reason of the patentee claiming more or less than he had a right to claim in the patent; and
- 2) The applicant must state at least one error forming the basis for reissue; and

- 3) The applicant must assert that none of the errors being corrected in this reissue application arose with deceptive intention on the part of the applicant (unless this statement was made in a previous reissue application that was intended, but failed, to correct the same error.)

Furthermore, if the application corrects errors not covered by the reissue oath/declaration, the applicant must file a supplemental oath/declaration covering the other errors. However, if several amendments are made during reissue prosecution, the applicant shouldn't file a new supplemental oath/declaration each time; rather, he should wait until the application is allowed and then submit one cumulative supplemental oath/declaration. Supplemental oaths are not required for nonsubstantive changes.

A reissue application must make a new claim for priority based on a foreign application, even if the claim was established in the original application. As with original applications, the foreign patent should be referenced in the oath/specification.

If the application does not seek to expand the scope of the claims from the patent, the reissue oath/application may be signed by an assignee of full interest. If the application does seek to expand the scope of the claims, the oath/declaration must be signed by the inventors and include either the written consent of all assignees or a statement by the applicant that no assignees exist.

Information Disclosure Statements

IDS's may be filed, but should be filed before examination (2 months after filing of the reissue application.)

Offer to Surrender Previous Patent

A reissue applicant should include an offer to surrender the original patent, and should be filed with either the original patent or an affidavit/declaration that the original patent is lost or inaccessible. If the reissue application is abandoned, an original patent that has been provided will, on request, be returned or transferred to another reissue application.

Examination

The examination of a reissue application begins 2 months after its filing date (the applicant may petition for a reduction of this time.) The examination is announced in the Gazette and the file is open to the public, who may submit protests to the reissue application. The examiner may not make a restriction requirement in a reissue application; however, the applicant may request several divisional reissues of one patent, and they will issue simultaneously. During prosecution, the applicant must notify the examiner if litigation is pending or has been completed that raised a material question of patentability.

Amendments

Amendments to the specification or claims are made by submitting a rewritten copy with additions underlined and deletions enclosed in brackets. New claims should be completely underlined, but cancelled claims should not be presented in brackets – rather,

applicant should indicate, “Cancel claim x.” Claims must also indicate “(amended)”, “(amended twice)”, etc. In all amendments, these markings should be made vis-à-vis the original patent. Amendments must be submitted with an explanation of the support for the amendment in the original disclosure, and each amendment must list the current status of each claim (pending, cancelled, allowed, or rejected.) Drawings may not be amended; as with nonprovisional applications, the applicant may submit a sketch to the examiner, and if the examiner approves the sketch, the applicant may file a substitute drawing.

Issue

The issue of a reissue patent terminates the original patent. Assignments, etc made in the original patent carry over to the reissue patent.

Appeal

Claims presented in an appellate brief of a reissue application should include all of the markings to indicate what has changed since the original application.

Certificate of Correction

A patent owner may request a certificate of correction when the PTO has made an error that materially affects the patent. No fees will be associated with such a request. If the error is so extensive that a certificate of correction would be confusing, the Commissioner may issue a corrected patent.

A patent owner may also request a certificate of correction to correct errors on his part that do not require a reexamination, such as a minor mistake or a clerical error. This request will require the payment of fees.

Requests for a certificate of correction should be made on form PTO-1050, should be single-spaced, and should leave room at the bottom for the signature of a PTO officer if the request is granted.

Correction of person to whom patent issued

A certificate of correction may be used if the patent issues to the wrong person. A patent will normally issue to the applicant unless the names of assignees are indicated on the Issue Fee Transmittal Form. In this case, the patentee must file a petition including:

- 1) The fee (unless the error resulted on the part of the PTO), and
- 2) A request of waiver of 37 CFR 3.81(a) to correct the names listed on the Issue Fee Transmittal Form, and
- 3) A statement that the error was inadvertent, and
- 4) If the patent should issue to an assignee, a copy of the notice of recording of an assignment document.

Correction of inventorship

A certificate of correction may be used to correct inventorship erroneously asserted in a patent. The patentee must file a petition including:

- 1) The fee (unless the error results on the part of the PTO), and

- 2) A statement from each inventor being added or deleted that the error occurred without deceptive intent on his part, and
- 3) A statement from each inventor not being added or deleted that he does not disagree with the change, and
- 3) If an assignment has occurred, a statement from all assignees agreeing to the change.

Correction of priority based on earlier application

A certificate of correction may be used to add or correct a reference to a parent application or provisional application, but only if the original application at least mentioned the earlier application somewhere; if not, the patentee should file a reissue application for this correction. A certificate of correction may also be used to add or correct a claim of priority based on a foreign patent; the patentee must submit a copy of the foreign patent application with the certificate of correction request.

Disclaimer

A patentee may make two types of disclaimers to a patent: statutory (disclaimer of a claim) or terminal (disclaimer of part of the term of the patent.)

A statutory disclaimer is the surrender of a claim in a patent. This may be done if the patent is invalid or unenforceable. A statutory disclaimer that takes effect during the term of a patent may not be withdrawn.

A terminal disclaimer is the surrender of part or all of the remaining term of the patent. A terminal disclaimer cannot disclaim only certain claims; it must disclaim the entire patent for part of the term. A request for a terminal disclaimer made during prosecution may be withdrawn before the patent issues, but rarely will a withdrawal be granted after the patent issues, as this would violate the principle of recapture.

A disclaimer may be filed by a patentee if he owns at least part of the patent (i.e., hasn't assigned it all away), or by all of the current owners and assignees. The disclaimer must be filed with:

- 5) The fee; and
- 5) An identification of the patent and the claims or duration of the term that is being disclaimed; and
- 5) The signature of the patentee or representative of record, or by each current owner or his representative of record; and
- 5) A statement of the signers' current ownership in the patent.

Request for Reexamination

Request for Reexamination

A reexamination is an *ex parte* proceeding used to ensure the viability of a patent in light of questions of patentability arising after issue. Any member of the public, including the patentee or the Commissioner *sua sponte*, may request a reexamination of a patent at any time within the enforceability of the patent (until the term expires, the statute of limitations expires, and any ongoing litigation is resolved.) Decisions of reexamination

will result in a certificate of reexamination, clarifying the scope of the patent after the reexamination. Reexamination proceedings are open to the public.

A reexamination request must include:

- 0) A statement pointing out a substantial new question of patentability based on a patent or publication; and
- 0) A copy of each patent or publication relied upon; and
- 0) An English translation of any non-English patent or publication; and
- 0) An explanation of the relevance of the cited patent or claim to the patent in question; and
- 0) An identification of every claim in question; and
- 0) A copy of the relevant portions of the specification, claims, and drawings in question; and
- 0) The fee.

If the request is made by the patentee, he may include a proposed amendment in light of the question raised by the citation. The amendments must be made according to the rules of amendments in reissue applications, except that where markings in amendments in a reissue application are made vis-à-vis the original patent, the markings in amendments in a request for reexamination are made vis-à-vis the patent at the time the reexamination request is received. The amendments must be filed with a statement showing the basis for each amendment in the original disclosure. No amendment in a reexamination application may broaden the scope of the claims or introduce new matter. The amendments will be considered in the reexamination proceeding, but will not be entered until the reexamination is complete.

The requester will be given an opportunity to correct any deficiencies in the request. Unlike submissions and protests, requests may not be filed anonymously. The request may not be faxed.

If the reexamination request is not by the patentee, the request and all correspondence filed by the requester or patentee must be served on the other party. Service may be made by:

- D) Delivering a copy of the request in person; or
- D) Delivering a copy of the request via first-class mail; or
- D) Leaving a copy at the person's place of business; or
- D) If the person has no place of business, leaving a copy at the person's home.

If service fails, duplicate copies must be filed with the PTO for service on the other party.

When the fee is paid in full, the request will be accorded a filing date and assigned a reexamination control number. Once filed, the request may not be abandoned, withdrawn, or stricken. An examiner (usually different than the examiner that allowed the patent) will be appointed to consider the request for examination. In addition to ensuring that the request is complete, the examiner will determine whether the "question of patentability" is substantial (the question materially bears on the patentability of any claim in the patent, not just those indicated by the requester) and new (the question is substantially different from every question of patentability previously considered by the PTO or a court with

regard to this patent.) The question must be based on a patent or publication qualifying under 35 USC 102(a), (b), (d), or (e) or 35 USC 103. Issues of double patenting or an improper claim of priority will be considered, but challenges based on public use, the on-sale bar, fraud, etc. will not be considered. The references need not be those cited by the requester, but may be *any* patent or publication, including those previously filed as submissions in the patent. The examiner may even make an additional search to determine whether a substantial, new question has been raised.

After the reexamination request has been filed, all correspondence must identify the number of the patent, the reexamination control number, the examining group art unit, and the examiner. Correspondence may be faxed.

Within 3 months of the date of filing, the examiner will issue a decision on the request. If granted, a reexamination of the patent will be ordered. If denied, the requester will receive a refund of the reexamination request fee, and the requester may petition the denial to the Commissioner within 1 month of the mailing date of the notice of denial.

Reexamination

If the request is granted, an order for reexamination will be sent to the patentee and (if different) the requester, including a statement of the issues raised and the examiner's initial position on the issue. The patentee may petition the grant of the reexamination request, but only in cases of clear error: *e.g.*, the request is not based on a patent or publication, or it raises a question already decided by the PTO.

If another reexamination of this patent is pending at the time this reexamination is ordered, they will be merged. If an interference proceeding is pending, one of the proceedings will be stayed. If a reissue application is pending, they may be merged or one will be stayed. If ordered while litigation is pending, the reexamination will usually be stayed.

The patentee may file a statement on the question, and may include proposed amendments, within 2 months of the mailing date of the reexamination order. These must be served on the requester, who will then have 2 months from the date of service of the statement to file a reply and serve it on the patentee. The requester's reply may raise new matter and any new issue relevant to patentability. The filing of the requester's reply ends his involvement in the reexamination; he will receive copies of all correspondence and office actions, but he may take no further action in the reexamination.

After these statements are filed, the examiner will reexamine the patent and make an office action. The patentee will be granted an opportunity to respond with arguments against any adverse actions by the examiner. If reexamination was requested as part of a settlement in litigation, or litigation has been stayed until reexamination is complete, the applicant has 1 month to respond; otherwise, the applicant is given 2 months. Regular petitions for extensions of time are not available in a reexamination; an extension will only be granted on a showing of cause filed during the response period. The patentee's response must be served on the requester.

After the patentee's response is filed or the response period has ended, the examiner will make a second office action. Any rejections will probably be made final, and final rejections will be treated as those in an original application. However, if the patentee timely responds to the final rejection, he may take further action within 1 month (the first response is assumed to include an implied request for an extension of time to make further response within 1 month of the filing of the first response, and such extensions of time will be granted automatically.)

All reexaminations terminate with a certificate of reexamination. The Commissioner will issue a certificate of reexamination taking the actions advised by the examiner: unpatentable claims are canceled, patentable claims are affirmed, and amendments are incorporated. If a base claim is rejected or canceled, any claims that depend on it are assumed to still be viable, and they need not be rewritten in independent form; but if a *new* claim proposed in an amendment is rejected or cancelled, all claims that depend on it are also rejected or cancelled. A copy of the certificate will be mailed to the patentee and the requester. The only instance in which a certificate *will not* be issued is when the reexamination is incorporated into a reissue application that ends with the issuance of a patent; in this case, the reissue patent serves as the reexamination certificate.

Other Patent Practices

Submission

Just as members of the public may submit a protest to an application, members of the public may file a submission, referencing other patents or publications relevant to a patent. The owner of a patent may submit other patents or publications with an explanation of how they differ from the claimed invention. Alternately, opponents may submit patents or publications to show that a patent is anticipated, obvious, not enabled, etc. A submission may be made at any time during the enforceability of the patent (until the patent has expired, the statute of limitations has expired, and all ongoing litigation has been finally concluded.)

A submission must contain:

- 3) A cover sheet identifying the patent by patent number, patentee, and issue date; and
- 3) A list of the patents and publications that form the basis of the submission; and
- 3) A copy of each patent or publication; and
- 3) An English translation of all non-English documents provided; and
- 3) An explanation of the relevance of the citation, including any affidavits/declarations filed in support; and
- 3) Proof of service on the patentee signed by the person served or the submitter's representative (unless submitted anonymously.)

Unlike a protest, a submission may only contain citations of patents and publications, and may only argue that a patent is anticipated, obvious, or non-enabling. Neither the documents forming the basis of the submission nor affidavits/declarations filed in support may base an argument on the patent owner's activity. Citations that the examiner has

considered during prosecution or evaluated in reexamination should not be submitted again.

If the submission is not by the patentee, the submitter must serve a copy of the submission on the patentee. Service may be made by:

-) Delivering a copy of the submission in person; or
-) Delivering a copy of the submission via first-class mail; or
-) Leaving a copy at the person's place of business; or
-) If the person has no place of business, leaving a copy at the person's home.

If service fails, the submitter must file duplicate copies of the submission with the PTO for service on the patentee.

A submission may be made anonymously. In this case, the submitter should omit all references of identity from the submission, and proof of service should not be signed.

The submitter may file a submission with a request for reexamination. Otherwise, the submission is not evaluated by the PTO, but becomes part of the record of the patent for use by others.

Maintenance Fees

Maintenance fees must be paid regularly to avoid premature expiration of a utility patent. No maintenance fees are required in plant or design patents. Three maintenance fees must be paid:

- Between 3 years and 3 years 6 months after the effective filing date (grace period ends at 4 years): \$1,050 (\$525 for small entities.)
- Between 7 years and 7 years 6 months after the effective filing date (grace period ends at 8 years): \$2,100 (\$1,050 for small entities.)
- Between 11 years and 11 years 6 months after the effective filing date (grace period ends at 12 years): \$3,160 (\$1,580 for small entities.)

If the fee is not paid within the regular period, the fee may be paid before the end of the grace period, but must include a surcharge.

If a maintenance fee is not paid by the end of the grace period, the patent expires. The patentee may petition for revival of an expired patent within 24 months of the end of the grace period by showing unintentional or unavoidable delay. If granted, the petition will revive the patent retroactively, such that protection did not lapse.

Express Mail, certificate of mailing, fax, and certificate of transmission procedures are available for the payment of maintenance fees. Payment should be submitted with:

- 41) A reference to the patent number, and
- 41) The number of the application on which the patent was granted, and
- 41) The period being paid (3½, 7½, or 11½), and
- 41) Whether or not small entity status is claimed, and
- 41) The amount of the fee, and
- 41) Any assigned customer number.

Correspondence regarding maintenance fees will be sent to the correspondence address unless a separate address is indicated for correspondence relating to maintenance fees.

PART IV: PTO PRACTICES

PTO Correspondence

Filing a Patent Application

A patent application is considered filed when all essential parts are received (or express mailed) to the PTO. Essential parts for a nonprovisional application consist of a specification including at least one claim and any necessary drawings; essential parts for a provisional application consist of a specification without claims, drawings, and cover sheet.

If a provisional application is missing an essential part, it must be resubmitted (since it can't be amended.) If a nonprovisional application is missing a part, missing some pages from a part, or contains a part that's so incoherent or informal that it doesn't meet PTO requirements, the PTO will determine if the application meets the requirements of all essential parts. If not, the application will not be forwarded for examination until complete and will receive a "Notice of Incomplete Application," and may:

-) Petition within two months and argue that application as filed was complete (may request refund of petition fee if successful); or
-) Petition within two months and argue that PTO actually received documents (may request refund of petition fee if successful); or
-) Supply the missing parts in a timely fashion and accept the date of this submission as the filing date (a supplemental oath/declaration is required if the oath has already been filed, and the submission contains new matter); or
-) Abandon the application and file a substitute.

If the application is complete without the missing parts, applicant will receive a "Notice of Omitted Items" and may:

- A) Petition within two months that PTO actually received documents (may request refund of petition fee if successful); or
- A) Supply the missing parts in a timely fashion and accept the date of this submission as the filing date (a supplemental oath/declaration is required if the oath has already been filed, and the submission contains new matter); or
- A) Abandon the application and file a substitute; or
- A) Accept the contents of the application-as-filed and waive any matter not disclosed (this is the default action – applicant can just do nothing – applicant secures the filing date but must amend application to remove references to missing parts.)

When submitting missing nonessential parts, the applicant should include a copy of the notification letter. A part is considered missing if it is so informal or nonspecific that it does not comply with the filing requirements. If an applicant disputes an "incomplete" ruling, the applicant can petition for review of the decision; if alleging that no defect occurs, the applicant can request a refund of the petition fee.

Application mailings can include a self-addressed, stamped postcard, stating the applicant's name, title of invention, number of pages in the specification, number of drawing pages, the presence or absence of an oath/declaration, and the amount of the fee and how it will be paid. The postcard will be marked accordingly and returned by the PTO, and will act as a receipt for these documents.

Employees of the patent office can't apply for patents until a year after they leave.

Filing Documents with the PTO

All correspondence must include the application number or the serial number of an application, or the issue date of a patent - documents that omit this information will be returned with a letter requesting resubmission with application number within two weeks to secure earlier filing date. Correspondence should also include the title of the invention, the name of the applicant, the application filing date or patent issue date, the group art number of the examining group responsible for the application, and the issue batch number for applications that have been allowed but haven't yet issued.

All documents requiring a signature must be signed by all owners in interest or their representatives. Originals must be filed for certified documents and those relating to registration to practice in the PTO; copies of all other documents may be submitted.

If the PTO is closed for an entire day (a non-business day), correspondence received on that day will be stamped and considered filed on the next business day. Deadlines falling on non-business days will be extended to the end of the next business day – except for the deadline for a provisional application, which always tolls one year from its filing date (no exceptions or extensions.) The following days constitute non-business days:

- Weekends.
- Federal holidays. If the holiday falls on a Saturday, the Friday before is also a non-business day; if it falls on a Sunday, the Monday after is also a non-business day. Holidays are listed in the Appendix.
- Days when the PTO is closed for an entire day for any reason (weather, power outage, etc.)

All documents written in a language other than English should be accompanied by a literal translation, a statement signed by the translator that the translation is accurate, and a signed request by the applicant to use the English translation for purposes of examination.

Delivery Methods and Filing Dates

Documents may be filed via the following methods:

- Hand delivery to the PTO during operating hours. Will be stamped and filed on the date delivered.
- Hand delivery to the PTO's post office pouch. If placed in the pouch before midnight on a business day, will be stamped and filed on that date; otherwise, will be stamped and filed on the next business day.

- Hand delivery to the examining group, for documents on which the examining group is required to act. Will be considered filed on the date delivered. The courier must provide a receipt for the documents that the examining group can fill out and give back to the courier. Receipt must identify:
 - 3) The application number, and
 - 3) Applicant's name, and
 - 3) The title of the invention, and
 - 3) A description of all papers being delivered.
- Regular mail. Will be stamped and filed on the date received. If the post office is on strike, documents filed promptly after service resumes with a statement that the document would have been filed earlier but for the interruption will be granted an earlier filing date. If the document isn't received by the PTO, the applicant may petition for the earlier filing date by promptly notifying the PTO after discovery of the error and providing:
 - 9) A copy of the mailing, and
 - 9) A statement by someone with personal knowledge of the original mailing that it was completed on the earlier date.
- Express mail. Documents, *including applications*, sent via express mail are considered filed as of the date they are mailed. These documents should reference the express mailing label number. Documents should be given directly to a USPS employee and the "date-in" on the mailing label should be properly marked. It is not recommended to use an "express mail" drop box. If the PTO fails to accord an express mail filing date, applicant may petition for the earlier filing date if:
 - 5) The applicant promptly notifies the PTO after discovery of the error; and
 - 5) The correspondence includes the number of the express mailing label; and
 - 5) The applicant provides a true copy of the express mailing label showing the earlier date of mailing.

If the express mailing label date as noted by the USPS is wrong, the applicant may petition for the earlier filing date if:

- 3) The applicant promptly notifies the PTO after discovery of the error; and
- 3) The correspondence includes the number of the express mailing label; and
- 3) The applicant provides evidence created within one business day of mailing that establishes the earlier filing date, such as an entry in an express mail log kept in the regular course of business.

If the express mail is not received at all, the applicant may petition for the earlier filing date by following the same procedures as for regular mail.

- Fax. If completely received before midnight, will be stamped and filed as of the date of transmission; otherwise, will be stamped and filed as of next business day. The application or patent number should be listed on the cover sheet. Documents which aren't acceptable via fax include:
 - Documents required to be certified.
 - Documents requiring an original signature.
 - Patent applications, except for a request for a CPA.
 - Interference correspondence, including agreements between parties in an interference.
 - Drawings.

- Requests for reexamination.
- Correspondence in applications under a secrecy order.

If the PTO has no record of a fax, the applicant may obtain a filing date as of the original transmission by promptly notifying the PTO after discovery of the error and providing:

- 1) A copy of the fax, and
- 1) A statement by someone with personal knowledge of the original transmission that it was completed on the earlier date, and
- 1) Providing a copy of the fax transmission form or some other business record showing the date of transmission that was created within one business day of the fax.

Certificate of mailing/certificate of transmission

Documents can include a certificate of mailing or transmission stating the date the document was deposited in the mail or faxed. If the document is a reply that must be made by a deadline, the document will be considered timely filed if the certificate of filing notes a date within the deadline, even if the document is received and stamped by the PTO after the deadline. Documents that can't rely on a certificate of filing include:

- Patent applications and CPAs.
- Correspondence in interference actions.
- Correspondence in disciplinary actions.
- Correspondence in an international application.

Correspondence from the PTO

Patent applications must specify an address for correspondence and an address for fees. Maintenance fee notices go to the latter address and all other correspondence goes to the former. Representative's address can be specified for these addresses by reference to his customer number. The patent office must be notified of changes in the correspondence address. The patent office will only correspond with one person:

- The patent office won't correspond with both a representative and his client.
- The patent office won't correspond with each representative in the case of split representation; applicants must designate one correspondence address.
- The patent office won't correspond with both a principal representative and all associates appointed by him. Correspondence will be directed to the associate unless the principal states otherwise.

If no correspondence address is specified and no direction is given:

- If a representative exists, the representative's mailing address is used.
- If a primary representative appoints an associate representative, the associate representative's mailing address is used.
- If multiple primary representatives exist, if one is local (in Washington D.C.) and the others are not, the local representative's address is used. Otherwise, the address of the representative who was registered last will be used.
- If no representative exists, no correspondence is sent from the patent office.

If a representative's address changes, the representative must notify the Office of Enrollment and Discipline *and* file a letter of change of correspondence address in each application in which he's the correspondent.

A foreign patentee may designate a domestic representative for correspondence.

Other PTO Policies

Confidentiality

Applications

Information about patent applications is usually held in confidence. There are several categories of access to which any particular person may be entitled:

- Complete file wrapper: The complete file wrapper consists of the entire record of prosecution of a patent application. This is available:
 - To applicants, assignees, and legal representatives of these parties.
 - To anyone with written permission to the complete file wrapper by an applicant, an assignee, or a legal representative.
 - To anyone who successfully petitions for access. Applicant receives copy of petition and is given an opportunity to object. Valid only for a stated duration.
 - To the public or any particular person if the Commissioner decides it's necessary to grant access (especially if the applicant is using the application to interfere with someone's business.)
 - To the public if the application issues as a patent.
 - To the public if the application is opened to the public.
 - To the public if the application is a reissue application.
 - To the public if the application is abandoned and referenced by an issued patent or an application open to the public.
- Application-as-filed: The application-as-filed consists of the application originally filed by the applicant with the PTO. This is available:
 - To anyone who has access to the complete application.
 - To anyone with written permission to the application-as-filed by an applicant, an assignee, or a legal representative.
 - To the public when wholly incorporated by reference in an issued patent.
- Relevant subject matter: When an issued patent refers to part of an earlier application (e.g., for benefit of a filing date, or when incorporated by reference), the common subject matter is available to the public on request. When a request is made, the applicant will be given the opportunity to object to access and to request that access be restricted to the portion of the application with common subject matter (applicant should include two copies of the part of the application to which access should be restricted.) If the applicant doesn't do this, the PTO will grant access to the complete file wrapper.

- Status information: Status information includes the application number; filing date; status of an application as pending, allowed, or abandoned; and whether any other applications rely on this one for purposes of a filing date. This is available:
 - To anyone who has access to the complete file wrapper or the application-as-filed.
 - To anyone with written permission to the application-as-filed by an applicant, an assignee, or a legal representative.
 - To anyone who has access to the status information of an application on which this application relies for benefit of a filing date.
 - To the public if the application number is referenced in an issued patent or an application open to the public.
 - To the public if the application is the national stage of an international application.

Access granted by permission of an applicant or assignee is valid until rescinded. Access granted by a legal representative is valid until rescinded or until the representative is removed from the case or disbarred. Access granted by the Commissioner expires after a certain period. The PTO will refuse to honor a written permission for access to any representative who's been disbarred by the PTO.

An assignee of the whole interest may request an applicant or former assignee to be barred from privileged access. If granted, the applicant or former assignee will be given access only after a showing that access is necessary to preserve his rights.

Trade secret/proprietary information

Inventors and representatives are under a duty to bring information materially relevant to patentability to the attention of the PTO. This often conflicts with the desire to withhold trade secret information. Nevertheless, this information must be disclosed, but the PTO will strive to keep proprietary information secret. Confidential documents should be submitted in an envelope clearly marked "Trade Secret," "Proprietary," or "Subject To Protective Order." The information must be submitted with a cover letter identifying the information as such, and may be submitted with a petition and fee requesting expungement and return of the material if it's found not to be important to patentability. In reexamination or reissue applications, both of which are open to the public, this information will be kept separate and discussed separately until/unless it's found material to patentability.

Assignment records

Assignment records are open to the public for issued patents, parent applications of an issued patent, and reissue applications. Assignment records for other applications are only available to applicants, owners, assignees, their legal representatives, and people with written permission from these people, and people granted access by petition. Requests must identify the reel and frame number of the assignment document or pay a fee for patent office to find it. When a document is opened, the *whole* document is opened, regardless of whatever else it contains.

Any information not covered by these rules can be requested by filing a “Freedom of Information Request.”

Interference files

While an interference is pending, the public is not permitted to access the interference file. When the interference has terminated or an award of priority has been granted, the interference file is open to the public unless it only contains pending applications, and will then be opened when any one application issues as a patent or SIR.

Reexamination proceedings

All reexamination proceedings are open to the public. The applicant may object to opening access.

Secrecy Orders

The Commissioner reviews all applications for national security interests, with the advice of the Department of Energy, NASA, and the Armed Services Patent Advisory Board, and if necessary will issue a secrecy order. Applications under a secrecy order will be prosecuted normally, but until the order is rescinded, it won't issue if found allowable; an appeal date won't be set for appeal of a final rejection; and interferences won't be declared. Secrecy orders will expire after a year unless reviewed and renewed by the Commissioner. The applicant may petition for rescission or modification of the secrecy order or for permission to disclose the subject matter of the application. A violation of this rule may lead to jail time, fines, or rejection of application.

Fees

All fees must be paid in advance by certified check, money order, treasury bill, bank note, coupons purchased from PTO, or PTO deposit account debit. Overpayments or mistakes in payment will be refunded, but changes of purpose that require smaller fee than paid (e.g., conversion of nonprovisional application to provisional application) won't result in refund.

Filing fee

A basic filing fee permits the applicant to file 20 claims, including 3 independent claims. An extra fee is charged for each independent claim above 3 *and* for each independent or claim above 20. A multiple dependent claim counts as the number of claims on which it depends; e.g., “A composition created by a process described in claims 1, 2, or 3” counts for 3 dependent claims. Any claim depending on a multiple dependent claim counts for the same number of claims as calculated for the multiple dependent claim.

Deposit accounts

Two types of deposit accounts exist: regular accounts (\$1,000 minimum balance) and restricted accounts (\$300 minimum balance; only charges for copies of patents can be charged to this account.) Accounts must be replenished monthly to minimum balance. An application can state that all or only some fees in patent prosecution can be charged to account, but a general authorization won't cover assignment recording fees or petitions other than for extensions of time.

Small entity status

Applicants may pay reduced fees if they qualify as small entities. To obtain small entity status, all patent and application rights reside with owners qualifying as small entities (individual inventors, nonprofit organizations including universities, and small businesses, as defined by tax law.) The location of each entity is irrelevant. The applicant can obtain small entity status by filing a statement to this effect (if not in English, applicant must also provide a translation.) Small entity status does not carry over from parent applications to continuing applications, or from provisional applications to nonprovisional applications; the applicant must provide another statement for the new case or reference the old statement.

Once proven, the applicant can claim a 50% reduction in certain fees, including:

- National application fees.
- Fees for petitions for extension of time.
- Fees for petitions for revival.
- Patent issue fees.
- Patent maintenance fees.
- Statutory disclaimer fees.

Fees *not* reduced include:

- Fees for any other petition.
- Document supply fees.
- Certificate of Correction fees.
- International application fees.
- Request for reexamination fees.

Reduction can no longer be claimed if any invention right is assigned to a nonqualifying entity, but if the rights are transferred back to small entities, reduced fees may be claimed again. If small entity status is filed in good faith but is later found to have been erroneous, applicant must promptly notify PTO and pay deficiency in any fees paid to date. But if applicant's status changes after small entity statement has been filed, it need not notify PTO and may continue paying reduced fees until it's time to pay an issue or maintenance fee, at which point applicant must notify PTO and pay regular fee.

An individual inventor is an applicant who has not assigned and is not required to assign patent or application rights to any organization that does not qualify as an individual inventor, a small business, or a nonprofit organization (including a university.) If rights previously transferred to a nonqualifying organization are returned to inventor or small business, then the reduced fees can be claimed. Small entity or individual owner status may be attained by filing a statement, signed by individual inventor or an officer of the small business and any organizations to which rights have been conveyed, before payment of issue fee, that applicant qualifies as individual inventor or small business and that all rights over patent remain with small businesses or individual inventors. Such status need only be established once per application.

If a status claim is rejected, the applicant must pay fees in full. If a status claim is granted but the applicant has paid full amount, the applicant can request refund of excess within two months. If status is fraudulently claimed, claimant can be prosecuted. If status is erroneously claimed, the applicant can avoid prosecution by notifying PTO and paying deficiencies in fees already paid. If status changes to nonqualifying organization, the applicant must notify office before paying any more fees, but no payment of deficit in fees already paid is necessary.

Registration, Change, and Removal of Representation

Appointment

Patent applicants or assignees can prosecute an application *pro se* or assign attorneys and agents registered by the PTO to prosecute the patent application. An attorney or agent can “act in a representative capacity” by filing a power of attorney/authorization of agent signed by the applicant, or simply by filing a paper on behalf of the applicants and including his name and registration number (or customer number.) Note that some privileges may be restricted for these representatives; they can’t sign a request for abandonment unless a continuing application has been filed, and they can’t grant to the file to others without the applicant’s permission. Finally, anyone can petition the Director for limited powers of representation.

Change in representation

The applicants or assignees can revoke power of attorney at any time. Revocation is effective on the date notice of revocation is received by the patent office. An assignment does not automatically revoke powers of attorney granted by the assignor.

A representative can request withdrawal. If the request is approved, withdrawal is effective on the date of approval. Usually, withdrawal will be denied if less than 30 days remain until a final deadline for reply to office action (including extensions.)

Unless an “irrevocable” right to prosecute exists, an assignee of entire interest has the power to prosecute and can revoke a power of attorney or authorization granted by the applicants or prior assignees.

A change of representation usually requires the authorization of all parties of interest (all applicants who haven’t assigned away their interests and all acting assignees.) Fewer than all parties can petition for change of representation on their interests. If this means a representative is added, the representative shares the power to prosecute with representatives of the parties that didn’t request the change. If power to prosecute is shared, all parties with power to prosecute must sign all subsequent office actions.

Power of attorney or authorization can be changed on all applications carried by an attorney or agent by filing an original request for one file and copies for all other files (must indicate file number in which original is located.)

If a representative dies, all powers given to and by that representative are nullified. A new principal representative must be appointed and associate representatives must be reappointed.

Powers and duties of representative

An appointed representative can appoint associate representatives, but associates can't appoint others. A power of attorney/authorization of agent may reference a customer number to appoint *all* listed practitioners as associates.

Representatives must file papers with the patent office in good faith; if not, criminal penalties and rejection of document can occur. This doesn't mean representative must make a dedicated search for contrary information; as long as representative doesn't have any reasonable knowledge that the information he's filing is false, this duty is satisfied.

Split power of attorney

The owners of an application may petition for authorization to appoint separate attorneys to govern their own interests, or to prosecute their own interests *pro se*. This will require all attorneys or unrepresented owners to sign every document requiring a signature. PTO correspondence will still only be directed to one address; applicants must designate one correspondence address.

Disclosure Document

An inventor, an owner of an invention, or a representative may send a document to the PTO disclosing the invention, including a \$10 fee, and signed by the sender. The sender should also include an enabling description and may provide a sketch or drawing. The document will be maintained by the PTO for 2 years and may be transferred to an application filed within that time to demonstrate a prior conception, reduction to practice, etc. The document may not be relied on for purposes of a filing date. Disclosure documents are kept in confidence by the PTO.

Defensive Publications Program

The Defensive Publications Program was established to permit an applicant to obtain a "defensive patent," wherein the applicant does not receive a patent and can't file an infringement action, *but* no one else can obtain a patent on it either, and the applicant can file an interference action within 5 years of the application's filing date. The applicant was permitted to have the application published in the program in exchange for provisionally abandoning the application, but the applicant could file a continuing application within 5 years of the filing date of the parent application. The Defensive Publications Program has been replaced by the ability to convert an application to a request for a statutory invention registration (SIR).

Deadline Practice (Time Limits)

Two kinds of deadlines may be enforced by the PTO: statutory periods and specified time limits.

Shortened Statutory Period

A statutory period is a time period in which the applicant must take some kind of action to avoid abandonment. If the applicant fails to act, the application is *automatically* abandoned at the end of this period and must be revived by petition to continue prosecution. If the applicant's action is incomplete, the examiner may:

- B) Notify the applicant of the defect and, if the deadline is less than a month away, give him 1 month from the mailing of notice to correct the defect; or
- B) Notify the applicant of the defect and give him *no* extra time to correct the defect (appropriate if the examiner feels the incomplete response was for purposes of delay); or
- B) Waive any formal defects in the response and accept it as complete.

Statutory periods are at least 30 days and at most 6 months. The following rules apply to the calculation of deadline dates for statutory periods:

- A statutory period begins on (and its expiration should be calculated from) the date stamped on the examiner's action.
- Any statutory period set for a duration of months ends on the *same date* as the beginning date. If this date falls past the end of the month, then the first of the next month is used. Examples:
 - 6 months from January 1 = July 1.
 - 6 months from February 28 = August 28.
 - 6 months from August 31 = February 31 = March 1.
- A 1-month statutory period must be at least 30 days, so the ending date will be extended if it's less than that (e.g., the starting date is in February.)
- Any statutory period that's extended is calculated from the *starting* date, not the *ending* date. Example:
 - 3 months from November 30 = February 30 = March 1.
 - A 3-month extension of the statutory period ending on this date does *not* end three months from March 1 (June 1), but on six months from November 30 (May 30).

A shortened statutory period (SSP) is used in the following cases:

- A 1-month (at least 30 days) period is set for a reply to a restriction requirement, or the supply of an omitted part in an incomplete reply.
- A 2-month period is set for a reply by the winning party in an interference to the examiner's last action, or for a reply to an *Ex parte Quayle* action.
- A 3-month period is set in almost all other instances.

Statutory periods will be reset in the following cases:

- If an examiner's action includes some defect, like an incorrect reference citation, the statutory period will be reset as follows:
 - If called to the attention of the Office within 1 month of the mailing date of the action, the period will be reset to the date of the mailing.
 - If called to the attention of the Office after 1 month, the period will be reset by the number of days it takes the examiner to correct the error.

- If an examiner makes a supplemental action during a reply period, the statutory period is reset to the beginning on the date the action is made.
- If a problem with postal service causes a delay in receipt of an office action, the applicant may petition for the date to be reset. The petition must be filed within 2 weeks of receipt of the action and include:
 - 0) A showing that a substantial portion of the statutory period elapsed during delivery, and
 - 0) Evidence of the date of receipt of the PTO action, and
 - 0) An explanation of how the evidence demonstrates the date of receipt.
- If a problem in the PTO caused a delayed mailing of the action, the applicant may petition for the date to be reset to the date of the postmark. The petition must be filed within 2 weeks of receipt of the action and include:
 - 5) A showing that the reply period was 1 month or less, or that payment of the issue fee was due; and
 - 5) Evidence of the address to which the action was sent; and
 - 5) Evidence of the postmark date of the PTO action (usually a copy of the envelope); and
 - 5) A statement that the PTO action was received in the postmarked envelope on a particular date.

If acting on a shortened statutory period, the applicant may request an extension of time until the 6-month statutory bar. An extension of time may be obtained by:

-) Filing a petition requesting the extension of time (may be made at any time before the 6-month statutory bar, *even if* the original SSP has already expired); or
-) Filing a general request for all available extensions of time; or
-) Filing a general authorization to charge all fees, including extension of time fees, to a PTO deposit account; or
-) Merely paying the extension of time fee without a specific request.

Extensions of time by automatic petition are not available in the following cases:

- Reply to a Board decision.
- Reply in an interference action.
- Reply in a reexamination proceeding.
- Reply brief in an appeal.
- Request for an oral hearing in an appeal.
- When an office action specifically prohibits extensions of time.

In these cases, the applicant may file a written request for more time, *but* the request must be filed before the period originally expires.

Specified time limit

A specified time limit (STL) is a time period in which the applicant must take some other action, but failure to act does not result in abandonment of an application. Unlike the automatic penalty for failure to reply to a statutory period, an examiner can accept filings a few days past a specified time limit on a showing of good cause. The period of an STL may be less than 30 days. Specified time limits are used for the following actions:

- Opportunity to object to a petition by someone else for access to the application file. Failure to respond results in an evaluation of the petition without the applicant's input.
- Submission of a part missing from an information disclosure statement. Failure to respond results in the IDS being considered informally or ignored by the examiner.
- Election of an invention required by a restriction requirement. Failure to respond results in an implied consent for the examiner to choose an invention and cancel the other claims.
- Cancellation of claims determined to interfere with another application or patent. Failure to respond results in an implied authorization for the examiner to cancel the interfering claims.

Expungement of Information

Information filed with the PTO that is considered an essential part of the original disclosure will not be expunged for any reason. Information that's not essential will be expunged and documents returned on petition of applicant. This applies to drawings as well.

A petition to expunge may be made in four cases:

- Trade secret/proprietary information. If the information is material to patentability, the petition will be denied; otherwise, the information will be expunged and documents returned to the applicant. The petition should include:
 - 0) The fee; and
 - 0) Identification of the material to be expunged; and
 - 0) A clear statement that information has not been disclosed to the public and is a trade secret, proprietary, or under a protective order;
 - 0) A commitment to retain the information during the term of the patent; and
 - 0) A statement that the petition is being submitted by the same person that originally submitted the information.
- Information unintentionally submitted. Documents accidentally submitted to the PTO that aren't material to patentability may not be expunged. The petition should include:
 - 2) The fee; and
 - 2) A statement that the PTO can return the documents and expunge the information before the patent issues; and
 - 2) A statement that the information was unintentionally submitted; and
 - 2) A statement that the information will irreparably harm the applicant if made public.
- Information submitted in the wrong application. The petition should include:
 - 2) The fee; and
 - 2) A statement that the PTO can return the documents and expunge the information before the patent issues; and
 - 2) A statement that the information was unintentionally submitted; and
 - 2) A statement that the information will irreparably harm the applicant if made public.

- Information submitted as part of the original disclosure that the applicant wants to have expunged. This will only be granted in extreme situations and requires a petition to the Office of Petitions to waive the requirements of 37 CFR 1.59.

Code of Conduct

PTO Rules of Practice forbid the use of offensive language in communicating with PTO employees or in a patent document. Applicants can't criticize other applications or an examiner's actions.

PTO employees may not express opinions of the patentability of an invention outside their duty of examination. PTO employees that perform any "quasi-judicial function" may not testify as experts on patentability. PTO examiners may not prosecute patents.

Duty of Disclosure

All people involved in the prosecution of a patent application have a duty to disclose to the PTO all information relevant to patentability (all information pertinent to the allowability of any claim in the application.) Information is relevant to patentability if it establishes a *prima facie* case of unpatentability of any claim in the application or refutes an argument of patentability. People who bear this duty include every inventor, representative, and other person substantially involved in the prosecution of the application. The duty exists until the application is abandoned or the term of the patent expires.

It should be noted that the presumption of validity of a patent, in light of a prior art reference, is stronger if the reference is voluntarily disclosed for the examiner's consideration during prosecution than if the reference is discovered after the patent issues.

If the PTO discovers this duty has not been met, the application may be rejected on grounds of fraud.

A representative of the patentee must keep the patentee informed of all news relevant to patentability.

PART V: APPENDIX

Foreign Country Guide

| COUNTRY | FOREIGN FILING (RIGHT OF PRIORITY) | PCT COUNTRY (PCT APPLICATION) | NAFTA/WTO (SWEARING BACK) |
|--------------------------|---------------------------------------|----------------------------------|------------------------------|
| Albania | * | * | * |
| Algeria | * | | |
| Angola | | | * |
| Antigua and Barbuda | | | * |
| Argentina | * | | * |
| Armenia | * | * | |
| Australia | * | * | * |
| Austria | * | * | |
| Azerbaijan | * | * | |
| Bahamas | * | | |
| Bahrain | * | | * |
| Bangladesh | * | | * |
| Barbados | * | * | * |
| Belarus | * | * | |
| Belgium | * | * | * |
| Belize | | | * |
| Benin | * | * | * |
| Bolivia | * | | * |
| Bosnia and Herzegovina | * | * | |
| Botswana | | | * |
| Brazil | * | * | * |
| Brunei Darassalam | | | * |
| Bulgaria | * | * | * |
| Burkina Faso | * | * | * |
| Burundi | * | | * |
| Cameroon | * | * | * |
| Canada | * | * | * |
| Central African Republic | * | * | * |
| Chad | * | * | * |
| Chile | * | | * |
| China | * | * | * |
| Colombia | * | | * |
| Congo | * | * | * |
| Costa Rica | * | | * |

| COUNTRY | FOREIGN FILING (RIGHT OF PRIORITY) | PCT COUNTRY (PCT APPLICATION) | NAFTA/WTO (SWEARING BACK) |
|-------------------------------------|---|--|--------------------------------------|
| Cote d'Ivoire | * | * | * |
| Croatia | * | | |
| Cuba | * | * | * |
| Cyprus | * | | * |
| Czech Republic | * | * | * |
| Democratic Republic of the Congo | * | | * |
| Denmark | * | * | * |
| Djibouti | | | * |
| Dominica | | | * |
| Dominican Republic | * | | * |
| Ecuador | * | | * |
| Egypt | * | | * |
| El Salvador | * | | * |
| Equatorial Guinea | * | | |
| Estonia | * | * | * |
| European Communities | | | * |
| Fiji | | | * |
| Finland | * | * | * |
| France | * | * | * |
| Gabon | * | * | * |
| Gambia | * | * | * |
| Georgia | * | * | * |
| Germany | * | * | * |
| Ghana | * | * | * |
| Greece | * | * | * |
| Grenada | | | * |
| Guatemala | * | | * |
| Guinea | * | * | * |
| Guinea-Bissau | * | * | * |
| Guyana | * | | * |
| Haiti | * | | * |
| Holy See | * | | |
| Honduras | * | | * |
| Hungary | * | * | * |
| Iceland | * | * | * |
| India | * | | * |
| Indonesia | * | * | * |
| Iran | * | | |

| COUNTRY | FOREIGN FILING (RIGHT OF PRIORITY) | PCT COUNTRY (PCT APPLICATION) | NAFTA/WTO (SWEARING BACK) |
|--|---------------------------------------|----------------------------------|------------------------------|
| Iraq | * | | |
| Ireland | * | * | * |
| Israel | * | * | * |
| Italy | * | * | * |
| Jamaica | | | * |
| Japan | * | * | * |
| Jordan | * | | * |
| Kazakhstan | * | * | |
| Kenya | * | * | * |
| Korea, Democratic People's Republic of (North Korea) | * | * | |
| Korea, Republic of (South Korea) | * | * | * |
| Kuwait | | | * |
| Kyrgyz Republic | * | * | * |
| Latvia | * | * | * |
| Lebanon | * | | |
| Lesotho | * | * | * |
| Liberia | * | * | |
| Libya | * | | |
| Liechtenstein | * | * | * |
| Lithuania | * | * | |
| Luxembourg | * | * | * |
| Macedonia, the former Yugoslav Republic of | * | * | |
| Madagascar | * | * | * |
| Malawi | * | * | * |
| Malaysia | * | | * |
| Maldives | | | * |
| Mali | * | * | * |
| Malta | * | | * |
| Mauritania | * | * | * |
| Mauritius | * | | * |
| Mexico | * | * | * |
| Moldova, Republic of | * | * | |
| Monaco | * | * | |
| Mongolia | * | * | * |
| Morocco | * | | * |
| Mozambique | | | * |

| COUNTRY | FOREIGN FILING (RIGHT OF PRIORITY) | PCT COUNTRY (PCT APPLICATION) | NAFTA/WTO (SWEARING BACK) |
|-------------------------------------|---------------------------------------|----------------------------------|------------------------------|
| Myanmar | | | * |
| Namibia | | | * |
| Netherlands | * | * | * |
| New Zealand | * | * | * |
| Nicaragua | * | | * |
| Niger | * | * | * |
| Nigeria | * | | * |
| Norway | * | * | * |
| Pakistan | | | * |
| Panama | * | | * |
| Papau New Guinea | | | * |
| Paraguay | * | | * |
| Peru | * | | * |
| Philippines | * | | * |
| Poland | * | * | * |
| Portugal | * | * | * |
| Qatar | | | * |
| Romania | * | * | * |
| Russian Federation | * | * | |
| Rwanda | * | | * |
| Saint Kitts and Nevis | * | | * |
| Saint Lucia | * | * | * |
| Saint Vincent and the Grenadines | * | | * |
| San Marino | * | | |
| Senegal, Republic of | * | * | * |
| Sierra Leone | * | * | * |
| Singapore | * | * | * |
| Slovak Republic | * | * | * |
| Slovenia | * | * | * |
| Solomon Islands | | | * |
| South Africa | * | | * |
| Spain | * | * | * |
| Sri Lanka | * | * | * |
| Sudan | * | * | |
| Suriname | * | | * |
| Swaziland | * | * | * |
| Sweden | * | * | * |
| Switzerland | * | * | * |

| COUNTRY | FOREIGN FILING (RIGHT OF PRIORITY) | PCT COUNTRY (PCT APPLICATION) | NAFTA/WTO (SWEARING BACK) |
|---------------------------------|---------------------------------------|----------------------------------|------------------------------|
| Syria | * | | |
| Taiwan | * | | |
| Tajikistan | * | * | |
| Tanzania, United Republic of | * | | * |
| Thailand | * | | * |
| Togo | * | * | * |
| Trinidad and Tobago | * | * | * |
| Tunisia | * | | * |
| Turkey | * | * | * |
| Turkmenistan | * | * | |
| Uganda | * | * | * |
| Ukraine | * | * | |
| United Arab Emirates | * | | * |
| United Kingdom | * | * | * |
| Uruguay | * | | * |
| Uzbekistan | * | * | |
| Venezuela | * | | * |
| Vietnam | | * | |
| Zambia | | | * |
| Zimbabwe | | * | * |

Fee Chart

| FEE | SMALL ENTITY | REGULAR FEE |
|--|-----------------|----------------|
| FILING FEES | | |
| Utility patent application | \$395.00 | \$790.00 |
| Each independent claim in excess of 3 | \$41.00 | \$82.00 |
| Each claim in excess of 20 | \$11.00 | \$22.00 |
| If application contains multiple dependent claims | \$135.00 | \$270.00 |
| Surcharge for filing fee or oath/declaration after filing date | \$65.00 | \$130.00 |
| Design patent application | \$165.00 | \$330.00 |
| Plant patent application | \$270.00 | \$540.00 |
| Reissue application | \$395.00 | \$790.00 |
| Each independent claim in excess of 3 | \$41.00 | \$82.00 |
| Each claim in excess of 20 | \$11.00 | \$22.00 |
| Provisional Application | \$75.00 | \$150.00 |
| Surcharge for filing fee or cover sheet after filing date | \$25.00 | \$50.00 |
| PETITION FEES | | |
| Extension of time (within first month) | \$55.00 | \$110.00 |
| Extension of time (within second month) | \$200.00 | \$400.00 |
| Extension of time (within third month) | \$475.00 | \$950.00 |

| FEE | SMALL ENTITY | REGULAR FEE |
|---|---------------------------|--|
| Extension of time (within fourth month) | \$755.00 | \$1,510.00 |
| Extension of time (within fifth month) | \$1,030.00 | \$2,060.00 |
| Notice of appeal | \$155.00 | \$310.00 |
| Brief in support of appeal | \$155.00 | \$310.00 |
| Oral hearing before Board | \$135.00 | \$270.00 |
| Decision on any other question | \$130.00 | \$130.00 |
| Suspension of rules | \$130.00 | \$130.00 |
| Review of refusal to publish an SIR | \$130.00 | \$130.00 |
| Review of refusal to accept timely payment of maintenance fee | \$130.00 | \$130.00 |
| Reconsideration of refusal to accept late payment of maintenance fee | \$130.00 | \$130.00 |
| Petition in an interference | \$130.00 | \$130.00 |
| Request for reconsideration of decision on a petition in an interference | \$130.00 | \$130.00 |
| Late filing of interference settlement agreement | \$130.00 | \$130.00 |
| Expedited handling of foreign filing license | \$130.00 | \$130.00 |
| Change in scope of foreign filing license | \$130.00 | \$130.00 |
| Retroactive license | \$130.00 | \$130.00 |
| Access to an assignment record | \$130.00 | \$130.00 |
| Access to an application | \$130.00 | \$130.00 |
| Identifying inventors after filing date without oath/declaration (nonprovisional application) | \$130.00 | \$130.00 |
| Filing application by less than all inventors, or not by inventors | \$130.00 | \$130.00 |
| Correction of inventorship (nonprovisional application) | \$130.00 | \$130.00 |
| According a filing date (nonprovisional application) | \$130.00 | \$130.00 |
| Entry of late priority papers | \$130.00 | \$130.00 |
| Expungement and return of information | \$130.00 | \$130.00 |
| Accepting color drawings or photographs | \$130.00 | \$130.00 |
| Entry of model or exhibit | \$130.00 | \$130.00 |
| Consideration of information disclosure statement (IDS) | \$130.00 | \$130.00 |
| Request to make special | \$130.00 | \$130.00 |
| Suspension of examination | \$130.00 | \$130.00 |
| Divisional reissues to issue separately | \$130.00 | \$130.00 |
| Amendment after payment of issue fee | \$130.00 | \$130.00 |
| Withdrawal of application from issue | \$130.00 | \$130.00 |
| Deterred issuance of patent | \$130.00 | \$130.00 |
| Access to interference settlement agreement | \$130.00 | \$130.00 |
| Patent to issue to assignee when named after payment of issue fee | \$130.00 | \$130.00 |
| Institution of public use proceedings | \$1,510.00 | \$1,510.00 |
| Processing an application with a specification not in English | \$130.00 | \$130.00 |
| Revival of unavoidably abandoned application | \$55.00 | \$110.00 |
| Revival of unintentionally abandoned application | \$395.00 | \$790.00 |
| Unavoidably delayed payment of issue fee | \$55.00 | \$110.00 |
| Unintentionally delayed payment of issue fee | \$395.00 | \$790.00 |
| Request for publication of SIR before examiner's first action | \$920.00 for filing of | less fee paid for filing of application |

| FEE | SMALL ENTITY | REGULAR FEE |
|--|-----------------------------|------------------------------|
| Request for publication of SIR after examiner's first action | \$1,840.00 for filing of | less fee paid application |
| Submission of information disclosure statement (IDS) | \$240.00 | \$240.00 |
| Identifying inventors after filing date without cover sheet (provisional application) | \$50.00 | \$50.00 |
| Correction of inventorship (provisional application) | \$50.00 | \$50.00 |
| According a filing date (provisional application) | \$50.00 | \$50.00 |
| Conversion of nonprovisional application to provisional application | \$50.00 | \$50.00 |
| Entry of submission after final rejection | \$395.00 | \$790.00 |
| Consideration of each additional inventions when restriction requirement is impossible | \$395.00 | \$790.00 |
| PATENT ISSUE FEES | | |
| Original utility patent | \$660.00 | \$1,320.00 |
| Design patent | \$225.00 | \$450.00 |
| Plant patent | \$335.00 | \$670.00 |
| DOCUMENT SUPPLY FEES | | |
| Uncertified copy of patent, regular mail | \$3.00 | \$3.00 |
| Uncertified copy of patent, overnight delivery by fax or to PTO box | \$6.00 | \$6.00 |
| Uncertified copy of patent, expedited delivery to customer within 2 days | \$25.00 | \$25.00 |
| Uncertified copy of plant patent in color | \$15.00 | \$15.00 |
| Uncertified copy of utility patent or SIR that contains color copies | \$25.00 | \$25.00 |
| Certified or uncertified copy of patent application as filed, regular mail | \$15.00 | \$15.00 |
| Certified or uncertified copy of patent application as filed, expedited mail | \$30.00 | \$30.00 |
| Certified or uncertified copy of application file wrapper | \$150.00 | \$150.00 |
| Certified or uncertified copy of office records, per document | \$25.00 | \$25.00 |
| Copies of assignment records, abstract of title, and certification in a patent | \$25.00 | \$25.00 |
| Library copies of all patents issued, per annum | \$50.00 | \$50.00 |
| List of all U.S. patents and SIRs in a subclass | \$3.00 | \$3.00 |
| Uncertified statement of status of payment of maintenance fees on patent | \$10.00 | \$10.00 |
| Uncertified copy of foreign patent | \$25.00 | \$25.00 |
| Certification of copies of documents from PTO records, per copy | \$25.00 | \$25.00 |
| Additional filing receipt | \$25.00 | \$25.00 |
| POST-ISSUANCE FEES | | |
| Providing a certificate of correction for applicant's mistake | \$100.00 | \$100.00 |
| Petition for correction of inventorship in a patent | \$130.00 | \$130.00 |
| Request for reexamination | \$2,520.00 | \$2,520.00 |
| Statutory disclaimer | \$55.00 | \$110.00 |
| Maintenance fee for utility patent (3 years) | \$525.00 | \$1,050.00 |
| Maintenance fee for utility patent (7 years) | \$1,050.00 | \$2,100.00 |
| Maintenance fee for utility patent (11 years) | \$1,580.00 | \$3,160.00 |
| Surcharge for paying maintenance fee during grace period | \$65.00 | \$130.00 |
| Surcharge for unavoidable delay in payment of maintenance fee | \$700.00 | \$700.00 |
| Surcharge for unintentional delay in payment of maintenance fee | \$1,640.00 | \$1,640.00 |
| Application for extension of the term of a patent (37 CFR 1.740) | \$1,120.00 | \$1,120.00 |

| FEE | SMALL ENTITY | REGULAR FEE |
|--|-----------------|----------------|
| Application for extension of the term of a patent (37 CFR 1.790): initial application for interim extension | \$420.00 | \$420.00 |
| Application for extension of the term of a patent (37 CFR 1.790): subsequent application for interim extension | \$220.00 | \$220.00 |
| MISCELLANEOUS FEES | | |
| Admission to exam for registration to practice before PTO: application fee | \$40.00 | \$40.00 |
| Admission to exam for registration to practice before PTO: registration fee | \$310.00 | \$310.00 |
| Registration to practice | \$100.00 | \$100.00 |
| Reinstatement of registration to practice | \$40.00 | \$40.00 |
| Certificate of good standing as an attorney or agent: copy | \$10.00 | \$10.00 |
| Certificate of good standing as an attorney or agent: suitable for framing | \$20.00 | \$20.00 |
| Regrading of morning section of examination | \$230.00 | \$230.00 |
| Regrading of afternoon section of examination | \$540.00 | \$540.00 |
| Establishing a PTO deposit account | \$10.00 | \$10.00 |
| Service charge for each month a PTO deposit account is below min. balance | \$25.00 | \$25.00 |
| Filing of disclosure document | \$10.00 | \$10.00 |
| Local delivery box rental fee (per year) | \$50.00 | \$50.00 |
| International-type search report | \$40.00 | \$40.00 |
| Self-service copy charge (per page) | \$0.25 | \$0.25 |
| Recording fee for assignemnt document | \$40.00 | \$40.00 |
| Publication in the <i>Gazette</i> of notice of the availability of a patent for licensing or sale | \$25.00 | \$25.00 |
| Labor charges for services (per hour) | \$40.00 | \$40.00 |
| Items and services supplied by the PTO not itemized in this list | Actual cost | |
| Processing and retaining fee for abandoned application with unpaid filing fee | \$130.00 | \$130.00 |
| Processing fee for bounced check | \$50.00 | \$50.00 |
| Handling of application in which proceedigns are terminated | \$130.00 | \$130.00 |
| Computer terminal session time (per hour) | \$40.00 | \$40.00 |

Federal Holidays

| DATE | HOLIDAY |
|-------------------------------|-----------------------|
| January 1 | New Year's Day |
| Third Monday in January | MLK Day |
| January 20 (every four years) | Inauguration Day |
| Third Monday in February | Washington's Birthday |
| Last Monday in May | Memorial Day |
| July 4 | Independence Day |
| First Monday in September | Labor Day |
| Second Monday in October | Columbus Day |
| November 11 | Veteran's Day |
| Fourth Thursday in November | Thanksgiving |
| December 25 | Christmas |

35 USC 102/103 Guide

See next page.

| REFERENCE | REASON FOR REJECTION | 102 | RIGHT OF PRIORITY | 1.130 | 1.131 | 1.132 |
|------------------------|---|-----|-------------------|---------------|-------|--------------|
| Patent/ application | The invention was claimed in a U.S. or foreign patent before the applicant invented it | a | Yes | Yes (for 103) | Yes | No |
| | The invention was claimed in a U.S. or foreign patent more than 1 year before the applicant applied for patent | b | Yes | No | No | No |
| | The applicant claimed the invention in a foreign patent but 12 months passed and the foreign patent issued before the applicant filed in the U.S. | d | No | No | No | No |
| | The invention was claimed in a U.S. patent filed by another before the applicant applied for a patent | e | Yes | Yes (for 103) | Yes | No |
| | The invention was described but not claimed in a U.S. patent filed by another before the applicant applied for a patent | e | Yes | No | Yes | Yes |
| | The invention is claimed in a copending U.S. application or in an issued U.S. patent | g | No | No | No | Yes (103(c)) |
| Publication | The invention was described in a publication before the applicant invented it | a | Yes | No | Yes | Yes |
| | The invention was described in a publication more than 1 year before the applicant applied for a patent | b | Yes | No | No | No |
| Other Evidence | The invention was known by others in the U.S. before the applicant invented it | a | Yes | No | Yes | Yes |
| | The invention was used by others in the U.S. before the applicant invented it | a | Yes | No | Yes | Yes |
| | The invention was in public use in the U.S. for more than 1 year before the applicant applied for a patent | b | Yes | No | No | No |
| | The invention was on sale in the U.S. for more than 1 year before the applicant applied for a patent | b | Yes | No | No | No |
| | The applicant abandoned the invention | c | No | No | No | No |
| | The applicant did not invent the invention | f | No | No | No | Yes (103(c)) |

Table Legend - Rejections May Be Overcome If:

Right of priority: This application benefits from the filing date of a foreign patent application, a parent application, or a provisional application that predates the critical date of the reference.

37 CFR 1.130: The invention claimed in this application is obvious, but not identical, to the invention claimed in the reference patent; the applicant owned both inventions at the time the invention claimed in the application was made; the applicant is willing to file a terminal disclaimer over the tail portion of the invention claimed in the application.

37 CFR 1.131: The applicant can "swear back" – demonstrate that he invented the invention before the critical date in the reference.

37 CFR 1.132: An "other" required by the statute is the same as the applicant, or the "other" derived his knowledge from the applicant. Under (a), the publication, public use, or knowledge must be "by others." Under (e), a patent that describes but doesn't claim the applicant's invention must be "by another." Under (f) or (g), the applicant may avoid an obviousness rejection by showing that the invention is commonly owned, under 35 USC 103(c).

