

The use of IP-Docs in the international patent, trademark and copyright process.

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P100 Introduction to International Electronic Filing System Patent requirements and methods

What Can Be Patented?

Not every invention is patentable in the United States. To be patentable, an invention must fall within the following categories. Patents are granted on new and useful and non-obvious inventions or discoveries of:

1. Processes (or methods, primarily industrial or technical),
2. Machines,
3. Manufactures (articles which are made),
4. Compositions of matter (chemical mixtures of ingredients, and new chemical compounds),
5. Processes involving new uses of known processes, machines, manufactures or compositions of matter,
6. Improvements in any of the above, and
7. Asexually reproduced plants.

Patents are also granted for fourteen years (and shorter terms) for any new, original and ornamental design for an article of manufacture.

In general, the Patent and Trademark Office is liberal in applying the limitations of these invention classes providing that an invention is presented in a palatable fashion. For example, over the years patents have been granted on: automobile parking structures, drive-in theaters, slot machines, and a host of computer applications.

Perhaps a better notion of what kinds of developments may be patentable, if they meet the other requirements of the law, can be acquired by indicating some of the things that are not patentable. Unpatentable subject matter includes: plans for doing business, business forms, perpetual motion machines, promotional advertising schemes, intended results of desired goals, functions (without apparatus), nebulous concepts or ideas, and laws of nature (as distinguished from applications of such laws). To summarize, desired functions are not patentable. It is the thing or the method that can be patented, not the result.

Other general requirements for patentability are that the invention must not be frivolous or contrary to public policy or to the public welfare.

Must be Useful, New and Non-obvious

Regardless of the type of invention for which a patent is sought, there are three general requirements for patentability, which are critically important. A patentable invention must be new, useful and unobvious.

Useful

The term useful in this connection refers to the condition that the subject matter has a useful purpose and also includes operativeness, that is, a machine, which will not operate to perform the intended purpose, would not be called useful, and therefore would not be granted a patent.

Novelty

In order for an invention to be patentable it must be new as defined in the patent law, which provides that an invention cannot be patented if --

"(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, or

"(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 application for patent in the United States"

If the invention has been described in a printed publication anywhere in the world, or if it has been in public use or on sale in this country before the date that the applicant made his invention, a patent cannot be obtained. If the invention has been described in a printed publication anywhere, or has been in public use or on sale in this country more than one year before the date on which an application for patent is filed in this country, a valid patent cannot be obtained. In this connection it is immaterial when the invention was made, or whether the printed publication or public use was by the inventor himself or by someone else. If the inventor describes the invention in a printed publication or uses the invention publicly, or places it on sale, he/she/they must apply for a patent before one year has gone by, otherwise any right to a patent will be lost.

Obviousness

A patent cannot issue if the subject matter sought to be patented is obvious to one of ordinary skill in the art to which the patent pertains. The section of the statute involved (35 U.S.C. § 103) states it this way:

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

To determine the "obviousness" of a discovery, one must first identify the prior art or technology. Locating the most pertinent prior art is not easy in view of widespread technological activity around the world. As a practical matter, one can never be positively certain of having located the most pertinent prior art in view of the abundance of technical knowledge and publications. However, any determination of patentability must be based upon some known prior art. With the known prior art in mind, patentability is determined by asking whether or not the invention would have been obvious to a person of ordinary skill in the field, who is aware of that prior art. To be patentable, an invention must differ from the prior art in a way that is not just an obvious change or addition. In considering the question, people may disagree on the abilities expected of the fictitious "person of ordinary skill," or on the content of the prior art, or on the conclusion that the imaginary person would reach. Any such disagreement is likely to result in a disagreement on the patentability of the invention in question. It remains an open question until decided by the court of last resort.

WHAT IS A PATENT?

A patent for an invention is a grant of a property right by the Government to the inventor, acting through the Patent and Trademark Office. The term of a utility patent is 20 years from the date the patent is granted, subject to the payment of maintenance fees. Failure to pay the current maintenance fee on time may result in expiration of the patent. The grant confers "the right to exclude others from making, using or selling the invention throughout the United States" and its territories. After the patent has expired anyone may make, use, or sell the invention without permission of the patentee, provided that the matter covered by other unexpired patents is not used. The terms may not be extended except by special act of Congress except for certain pharmaceuticals.

A patent is personal property and may be sold to others or mortgaged it may be bequeathed by a will, and it may pass to the heirs of deceased patentee.

Patents may be owned jointly by two or more persons as in the case of a patent granted to joint inventors. Any joint owner of a patent, no matter how small the part interest, may make, use, and sell the invention for his or her own profit, without regard to the other owner, and may sell the interest or any part of it, or grant licenses to others, without regard to the other joint owners, unless the joint owners have made a contract governing their relation to each other.

Co-inventors may be named on a patent and all rights may be assigned to the owner in the form or a contract between the co-inventor and the owner.

A patentee who makes or sells patented articles is required to mark the articles with the word "Patent" and the number of the patent. The penalty for failure to mark is that the patentee may not recover damages from an infringer unless the infringer was duly notified of the infringement and continued to infringe after the notice.

Some persons mark articles sold with the terms "Patent Applied For" or "Patent Pending." These phrases have no legal effect. The protection afforded by a patent does not start until the actual grant of the patent.

Since the rights granted by a United States patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in other countries must apply for a patent in each of the other countries or in regional patent offices. No United States patent can be obtained if the invention was patented abroad before applying in the United States on an application filed more than 12 months before filing in the USA. Six months are allowed in the case of a design patent.

An application for a patent is made to the Commissioner of Patents and Trademarks and includes:

- 1). A written document which comprises a specification (description and claims), and an oath or declaration
- 2), Drawings
- 3). The filing fee.

DRAWINGS

The applicant for a patent will be required by law to furnish a drawing of the invention whenever the nature of the case requires a drawing to understand the invention. This includes practically all inventions except compositions of matter or processes, but a drawing may be useful in the case of many processes.

The drawings must show every feature of the invention specified, and is required by the Office rules to be in a particular form. The Office specifies the size of the sheet on which the drawing is made, the type of paper, the margins, and other details relating to the making of the drawings. Specifications regarding the drawings include Character of lines, Hatching and Shading, Scale, Reference Characters, Symbols and Legends, Views and Arrangement of views.

The requirements relating to drawings are strictly enforced. Applicants are advised to employ competent draftsmen to make their drawings.

MODELS

Models are not required in most patent applications since the description of the invention in the specification and the drawings must be sufficiently full and complete and capable of being understood to disclose the invention without the aid of a model. A model will not be admitted unless specifically requested by the examiner.

DESIGN PATENTS

The patent law provides for the granting of design patents to any person who has invented any new, original and ornamental design for an article of manufacture. The design patent protects only the appearance of an article, and not its structure or utilitarian features. A design Patent has a term of 14 years, and no fees are necessary to maintain a design patent in force. The drawings of the design patent conform to the same rules as other drawings, but no reference characters are required. The specification of a design

application is short. Only one claim is permitted, following a set form.

PROVISIONAL APPLICATION

A provisional patent is a completely new type of application designed to secure a priority date without counting against the new patent term of 20 years from the filing date of application.

Provisional applications are intended to be simple and inexpensive. No claims are needed, no oath or declaration is needed. A provisional application, however, will never issue as a patent and it will automatically go abandoned twelve months after it is filed.

The basic requirements of a provisional application:

- 1), The name of the inventor
- 2). A specification
- 3). Drawings
- 4). Filing Fee.

COPYRIGHTS

A copyright protects the writings of an author against copying. Literary, dramatic, musical and artistic works are included within the protection of the copyright law.

TRADEMARKS

A trademark relates to any word, name, symbol or device, which is used in trade with goods to indicate the source or origin of the goods and to distinguish them from the goods of others.

WHAT CAN BE PATENTED?

Not every invention is patentable in the United States. Any person who "invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvements thereof, may obtain a patent."

1. Processes (or methods, primarily industrial or technical),
2. Machines,
3. Manufacture (articles, which are made),
4. Compositions of matter (chemical mixtures of ingredients, and new chemical compounds),
5. Processes involving new uses of known processes, machines, manufactures or compositions of matter,
6. Improvements in any of the above, and
7. Asexually reproduced plants.

Unpatentable subject matter includes: plans for doing business, business forms, perpetual motion machines, promotional advertising schemes, intended results of desired goals, functions (without apparatus), nebulous

concepts or ideas, and laws of nature. Desired functions are not patentable. It is the thing or the method that can be patented, not the result.

Other general requirements for patentability are that the invention must not be frivolous or contrary to public policy or to the public welfare.

Regardless of the type of invention for which a patent is sought, there are three general requirements for patentability, which are critically important. A patentable invention must be new, useful and unobvious.

USEFUL

The term useful in this connection refers to the condition that the subject matter has a useful purpose and also includes operativeness, that is, a machine which will not operate to perform the intended purpose would not be called useful, and therefore would not be granted a patent.

NOVELTY

In order for an invention to be patentable it must be new as defined in the patent law, which provides that an invention cannot be patented if

- (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", or
- (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 application for patent in the United States."

In this connection it is immaterial when the invention was made, or whether the printed publication or public use was by the inventor himself or by someone else. If the inventor describes the invention in a printed publication or uses the invention publicly, or places it on sale, he/she/they must apply for a patent before one year has gone by, otherwise any right to a patent will be lost.

OBVIOUSNESS

The subject matter sought to be patented must be sufficiently different from what has been used or described before so that it may be said to be unobvious to a person having ordinary skill in the area of technology related to the invention. For example, the substitutions of one material for another, or changes in size, are ordinarily not patentable. With the known prior art in mind, to be patentable, an invention must differ from the prior art in a way that is not just an obvious change or addition.

ATTORNEYS AND AGENTS

The preparation of an application for patent is an undertaking requiring the knowledge of patent law and Patent and Trademark Office practice. Inventors may prepare their own applications and file them, but unless they are familiar with these matters or study them in detail, they may get into considerable difficulty. While a patent may be obtained in many cases by persons not skilled in this work, there would be no assurance that the patent obtained would adequately protect the particular invention.

Most inventors employ the services of registered patent attorneys or patent agents.

EXAMINATION OF APPLICATION

The examination of the application consists of a study of the application for compliance with legal

requirements and a search, to see if the claimed invention is new and unobvious. A decision is reached by the examiner in the light of the study and the results of the search.

If the invention is not considered patentable subject matter claims will be rejected. It is not uncommon for some or all of the claims to be rejected on the first action by the examiner relatively few applications are allowed as filed. The applicant must then request reconsideration in writing, and must distinctly point out the supposed errors in the examiner's action. After response by the applicant the application will be reconsidered. The second Office action usually will be made final.

MARKETING ASSISTANCE

There are organizations, which can tell you how and where you may be able to obtain assistance in developing and marketing your invention?

You may inquire of such organizations as chamber of commerce, and banks. Many communities have locally financed industrial development organization, which can help you locate manufacturers and individuals who might be interested in promoting your idea.

In nearly all states there are state planning and development agencies or departments of commerce and industry which seek new product and new process ideas to assist manufacturers and communities in the state. If you do not know the names or addresses of your state organizations, you can obtain this information by writing to the governor of your state.

The Patent and Trademark Office cannot act or advise concerning the business transactions or arrangements that are involved in the development and marketing of an invention. However, the Office will publish, at the request of a patent owner, a notice in the Official Gazette that the patent is available for licensing or sale. The fee for this is \$20.00.

Source information derived from: "General Information Concerning Patents - U.S. Department of Commerce - Patent and Trademark Office.

P101 Introduction to the USPTO EFS

Technical Documentation Development:

Introduction-

Views required-MPEP- 37 CFR 1.81, 1.84 h 1,2,2i,2ii,3,4,5, 5i, 5j

Source: USPTO- www.uspto.gov/web/offices/pac/doc/general/drawing.htm

Patent Drawings submitted to the USPTO must include as many views as necessary to show the invention. Since one drawing of an object is not usually sufficient to show all the important features, several drawings are typically necessary to illustrate an object from different angles. Plan (illustrating the top view), elevation (illustrating the height), section or perspective views can be used. Drawings should be arranged on the page upright and conserving space while remaining clearly separate. The most common of these views are: front side, rear side, left side, right side, top side and bottom side views, in which the viewer's gaze is centered on the side illustrated.

Perspective- Perspective views are illustrated in such a way as to present an object as it would be seen in everyday life, with a sense of depth. The same 6 views: front, rear, left, right, top and bottom given above can be used as perspective views, showing the object angled slightly away from the viewer. Variations of perspective views are exploded views, which display parts of an object disassembled and spread apart in

space to show features that would otherwise be hidden. Another perspective variation is called a sectional view, in which part of the object is cut away to reveal the interior makeup.

Objectives:

3D solid models- 3D solid models can be created using Computer Animated Drawing (CAD) programs, assembled in cyberspace and can be moved and manipulated more freely than an actual model. With just one 3D model, many different views can be generated and printed out as 2D drawings.

3D surface models:

2D views- 2D drawings do not illustrate depth, and when created in a computer drawing program are simply mechanized versions of drawings done on paper.

Intanglio and relief:

Artistic and creative use of line.

Graphical Symbols- MPEP- 37 CFR 1.84 n:

Graphical symbols such as flowcharts and electrical schematics can be included in patent drawings as long as they are easily understood and clearly identified in the specification. 2D CAD programs can be used to generate graphical symbols that are easily recognizable and can be assembled into drawings.

Flow charts:

Flow charts can be included in the drawing set for a patent application when they are necessary to show processes, movement and/or progression. Typically used to illustrate manufacturing methods or computer programs.

Drawing Requirements:

Types: (MPEP- 37 CFR 1.81, 1.84a 1 &a2)

Formal and Informal- MPEP- 37 CFR 1.84, (informal) 608.02 (b), 37 CFR 1.85

Formal drawings are those that comply with the specifications outlined by the USPTO Manual for Patent Examining Procedure section 37 CFR 1.84. Informal drawings are those that do not comply with the USPTO's specifications and, if submitted, will be considered by a Draftsperson for examination purposes only.

Engineering Drawings:

Utility Patents Details- (MPEP- 1502.01, 35 U.S.C. 101)

Source: www.uspto.gov/web/offices/pac/utility/utility.htm

There are two types of utility patent applications- provisional and non-provisional. The most common patent granted by the USPTO is a non-provisional utility patent. A utility patent application must include a written specification describing the invention and the manner and process of using and making it in such a way as to be understood and acted upon by anyone skilled in science or art. Drawings are usually necessary to properly illustrate an invention, and an application that requires drawings must include enough different views to show the invention completely.

Views Required: (pg. 10 of 15 (USPTO))

An application must contain enough views- arranged to save space- to divulge the invention fully. They should be grouped, preferably upright, separately on the page. Plan, elevation, section or perspective views may be used. Important features of the invention should be numbered for referencing within the specification.

Prior Art: (MPEP- 608.02 (g))

Figures showing prior art are usually unnecessary, but should be included when needed for an understanding of the invention.

Features: (pg. 5 of 15)

Parts Behind Transparent Surfaces: (pg. 11 of 15)

Functional Parts:

Surface Markings: (pg. 12 of 15)

Shading is used to indicate the surface or shape of different elements of the invention. Surface shading can indicate curve or depth and is especially relevant in perspective drawings.

Unclaimed Environment: (pg. 6 of 15)

Unclaimed areas of an invention, that are not part of the patent but are necessary to the drawings for understanding, are usually indicated by their being drawn with broken lines.

Claimed:

Design Patents

Details: (MPEP- 1500, 1501, 1502, 1503, 1503.01)

Source: www.uspto.gov/web/offices/pac/design/definition.html

A design patent is geared specifically to protecting the ornamental appearance of an invention and, to do so, relies heavily on the inclusion of a number of highly detailed and specific drawings. Design patents cover only the appearance and surface ornamentation of an object and must accurately show the object's shape, proportions, contours and its material properties and/or textures. Design patent applications consist of the following elements: 1) Preamble stating the name of the applicant, title of the design and a brief description of its nature and intended use. 2) Description of the drawings 3) Feature description 4) A single claim 5) Drawings 6) Executed oath or declaration

Views Required (MPEP-1503.02 I. And pg. 6 of 9)

A design patent application must contain drawings illustrating completely all sides and/or views of the claimed object. Typically a full disclosure of the object's appearance requires at least six views: front, back, right, left, top and bottom. Although not required, perspective views are suggested to give a more clear description of the object's appearance. Duplicate views (if right and left look exactly the same) need not be included.

Prior Art: (MPEP- 1503.01 IID, 37 CFR 1.71, 608.02 (g) 6.36.01)

Source: www.uspto.gov/web/offices/pac/design/design.html

Features (MPEP- 1503.02, 37 CFR 1.152, 1503.01 II D)

Design patents must illustrate all features of the invention that are visible during normal use.

Parts Behind Transparent Surfaces: (MPEP- 1503.02 III, 15.50)

Source: www.uspto.gov/web/offices/pac/design/definition.html Pg. 7 of 9

Parts that can be seen through transparent surfaces should be drawn with solid lines slightly thinner than the drawing's other lines to distinguish it.

Scenarios:

Functional Parts: (MPEP- 1504.01 © I, II)

Functional parts that are not visible during an invention's "normal use" need not be included in the illustrations of a design patent application.

Surface Markings: (MPEP- 1503.02 II, 15.49)

Markings on the surface of a claimed object- such as labels or logos- must be illustrated in continuous lines. These markings will be considered as part of the patented invention and consideration should be given as to whether they are an integral part of the device.

Unclaimed Environment: (1503.02 III, 15.50)

Source: www.uspto.gov/web/offices/pac/design/definition.html (pg. 7-8 of 9)

Unclaimed elements of a design are illustrated using broken lines and are included for illustrative purposes only if necessary to show how the object is used.

Claimed Embodiments: (MPEP- 1503.03, 37 CFR 1.153)

The claimed design illustrated in a design patent application should be shown using solid lines.

Alternate Embodiments: (Color- MPEP- 1503.02, 37 CFR 1.152 (2), 15.05.041)

Source: www.uspto.gov/web/offices/pac/design/definition.html (pg. 9 of 9)

While color drawings can be considered as formal drawings if the proper application for such consideration is filed, color schemes particular to the object are normally illustrated using specified hatch patterns. The same sort of hatch patterns are used to illustrate different materials the object may be made of (metal, wood, ceramic, etc). If a design patent application contains this type of hatching in its illustrations, it must be explained as such in the description.

Materials: (see above.)

Line Styles: (MPEP- 1503.02 II, III)

Source: www.uspto.gov/web/offices/pac/design/definition.html (pg. 7 of 9)

Most design patent applications are illustrated in black and white and, as such, require the use of different line styles to clearly disclose the claimed object. Edge lines of the drawing should be continuous lines of about .2 to .3 mm thick. Environmental structures and surface markings should be dashed or phantom lines. Shading on opaque surfaces should be shown using parallel continuous lines, broken lines or dots (stippling) about .1 to .2 mm thick. Transparent or translucent surfaces should be illustrated using parallel continuous lines about .1 to .2 mm thick. Sectional views containing hatch lines should be shown as continuous, parallel, straight, slanted lines about .1 mm thick.

Photographs: (MPEP- 1503.02 V., 15.05.03, 15.05.041, 15.45)

Source: www.uspto.gov/web/offices/pac/design/definition.html (pg.8 of 9)

Photographs may be considered as formal illustrations of a claimed object only if granted permission by the USPTO under petition 37 CFR 1.84(b)(1). High-quality black and white photos may be used if they fully disclose all the elements and views of an object with no ambiguity. Color photos can also be petitioned for, but are usually considered as informal drawings.

Paper and Margins: (MPEP- 608.02, 37 CFR 1.84 e,f,g)

Source: www.uspto.gov/web/offices/pac/doc/general/drawing.htm (pg. 2 of 7)

Drawings should be submitted on one side only of white, strong, nonshiny paper that is free from creases and folds. The paper should be 21.0 cm by 29.7, or 8.5 by 11 inches. Top and left margins should be at least 2.5 cm (1 inch), right margin should be at least 1.5 cm (5/8 inch) and bottom margin at least 1.0 cm (3/8 inch).

Mediums: (MPEP)

Formal utility or design patent drawings can be black and white lines drawings, black and white photographs or color drawings/photographs.

Arrangement of Views: (MPEP- 608.02, 37 CFR 1.84 h 1,h2 h2i, h2ii, h3, I)

Drawings should be arranged on the page to save space but also remain clearly defined. Illustrations should be arranged upright in respect to the top of the page.

Reference Numerals: (MPEP- 608.02, 37 CFR 1.84 p, p1, p2, p3, p4, p5)

All figures in a utility patent should be numbered using consecutive Arabic numerals, beginning on the first page.

Lead Lines: (MPEP- 608.02, 37 CFR 1.84 q)

In a utility patent application, reference numerals must be clearly identified with the part they are referencing by the use of lead lines which extend from the surface of the object to close to the number itself.

Arrows: (MPEP- 608.02, 37 CFR 1.84 r, r1, r2, r3)

Arrows can be used as long as their meaning is clear, either as an indicator at the end of a line, to show several parts labeled with the same number, or to show direction of movement.

Line Styles: (MPEP- 608.02, 37 CFR 1.84 l)

Solid lines are used for shading and to show the edge of an object. Dashed lines are used to illustrate hidden parts. Any part of a design patent drawing that is necessary to show, but is not part of the invention should be drawn with phantom (dash-dot-dot-dash) lines. Lastly, projected (dash-dot-dash) lines should be used to show how parts of an object fit together.

Character of Lines: (MPEP- 608.02, 37 CFR 1.84 l)

Source: www.uspto.gov/web/offices/pac/doc/general/drawing.htm (pg. 4 of 7)

Excepting color drawings, all lines in a drawing must be black and of a thickness allowing photocopies to be made without loss of detail.

Descriptive Legend: (MPEP- 608.02, 37 CFR 1.84 (o))

Source: www.uspto.gov/web/offices/pac/doc/general/drawing.htm (pg. 5 of 7)

A legend describing elements of a drawing, when necessary, should contain as few words as possible. Legends may also be used as elements of flow charts.

Scale: (MPEP- 608.02, 37 CFR 1.84 (k) (k1), (k2), (k3))

Source: www.uspto.gov/web/offices/pac/doc/general/drawing.htm (pg. 4 of 7)

The object illustrated should be shown as the same size in different figures and, if a larger view of a certain element is needed, that should be drawn separately and labeled as such. The scale of an object should be large enough that the details are easily comprehensible and, if it is reduced to 2/3 size for reproduction, the lines will not crowd each other.

Copyright or Mask Work Notice: (MPEP- 37 CFR 1.71 (A), (B), (C), 608.02 37 CFR 1.84 (o))

Source: www.uspto.gov/web/offices/pac/doc/general/drawing.htm (pg. 6 of 7)

If applying for a patent on an object that is already copyrighted, the copyright notice should be included below the copyrighted design, within the margins of the drawing. The lettering for this notice should be between .32 and .64 cm (1/8 to 1/4 inches) high. The same rules apply for mask work, a particular category of copyright.

Security Markings: (MPEP- 608.02, 37 CFR 1.84 (v))

Source: www.uspto.gov/web/offices/pac/doc/general/drawing.htm (pg. 6 of 7)

Certain authorized security markings may be placed outside the sight (margins) of a drawing, in the center of the upper margin.

Corrections: (MPEP- 608.02, 37 CFR 1.84 (w))

Source: www.uspto.gov/web/offices/pac/doc/general/drawing.htm (pg. 6 of 7)

Any corrections to drawings should be durable and permanent, either using erasure or masking fluid such as White Out.

Prohibited Elements: (MPEP-)

There are 10 elements that should not appear on patent drawings: 1) Any indication regarding the scale of the figures, as the USPTO often reduces the size of drawings when printing them out, making such indications inaccurate. 2) Expressions or illustrations of profanity or violent imagery, except as is necessary for the patent. 3) Trademarks, unless you are able to prove a proprietary interest in the mark. 4) Anything obviously irrelevant and unnecessary to the drawing. 5) Descriptive legends- text labeling certain parts- except where absolutely necessary, as in a flowchart. 6) Center lines illustrating the center of circular parts. 7) Brackets or circles around reference numbers. 8) Any lines connecting separate figures, unless those lines indicate electrical waveforms. 9) Solid black shading, unless used in a bar graph, or to indicate black color in an object that contains color as a distinguishing feature. 10) Figures or artwork covered by copyright, unless you can prove a proprietary interest in the copyright.

Identification Information: (MPEP- 608.02 37 CFR 1.84 (c))

Source: www.uspto.gov/web/offices/pac/doc/general/drawing.htm (pg. 2 of 7)

Although identification information on drawings is optional, it may be a good idea to provide such info on the back of drawings in case they become separated from the rest of the application. Such info should include 1) the title of the invention 2) the name of the inventor 3) application serial number and 4) group art unit. This info should be put lightly on the back of drawings, so as not to show through. The last 2 pieces of info will not be known until the patent is applied for, and are only relevant to be included with corrected drawings.

ELECTRONIC FILING SYSTEM

Source: www.uspto.gov/ebc/efs/downloads/documents.htm

All info from USPTO @ - www.uspto.gov/ebc/efs/downloads/documents.htm

The Electronic Filing System (EFS) is a service offered by the USPTO to provide patent applicants and practitioners with software capabilities and technical guidance to author patent application information electronically for its submission to the USPTO via the Internet. EFS is made up of two software elements: 1) authoring software that is in compliance with USPTO business rules and electronic data capture standards and 2) submission software that organizes, validates, compresses and submits securely the electronic application files and information. The free and preferred authoring software provided by the USPTO is a tool known as PASAT (Patent Application Specification Authoring Tool). PASAT utilizes the MS-Word environment to author the specification document. A WordPerfect XML Specification Template is also made available for authoring. The software provided by the USPTO for submission formatting is called the Electronic Packaging and Validation Engine, or ePAVE. After a successful transmission, ePAVE returns an acknowledgment receipt including the date the USPTO received the application and an assigned patent application number.

System requirements for filing with EFS:

Minimum:

Pentium Processor: 233 MHz
Memory: 64 MB RAM
Screen Display: 800x 600
Browser: Internet Explorer 5.0
Plug-in: TIFF Viewer Plug-In
Free Hard Disk Space: 42 Megabytes
Internet Connection: 56 Kbps or faster modem
Operating System: Windows 95/98/2000 with Service Release 1 or higher/
NT 4.0 (Service Pack 3 or later)
Applications: Microsoft Word 97/2000 including Office Assistant for PASAT
OR WordPerfect 9 (Service Pack 2 or higher) for the WordPerfect XML Template
OR Graphics package (for TIFF image formatting)
Up-to-date Printer Driver(s)
MDAC 2.1

Scanner: Capable of producing black and white TIFF images at 300 dpi: non-compressed or group IV compression

Recommended for Best Results:

Pentium Processor: 266 MHz or higher
Memory: 128 MB RAM
Screen Display: 1024 x 768 or higher
Browser: Internet Explorer 5.5
Plug-in: Alterna TIFF Plug-In v 1.3.5

TIFF Files:

EFS allows the submission of electronic drawing files as TIFF (Tagged Image File Format) only. TIFF is a common and widely accepted file format, and all image files- including figures and declarations, should be submitted as TIFF files. Submitted TIFF images should be 300 dpi, black and white, and should be compressed with "Group IV" compression, although EFS also accepts uncompressed TIFF images. TIFF images are a common file output on many graphics programs and Imaging- the Windows accessory program- will produce TIFF images in Group IV compression. The USPTO is exploring the idea of accepting a wider range of file formats, including ChemDraw and Mathematica.

Formatting:

Formatting patent applications to EFS specifications is made easier by the free, assisted software programs provided by the USPTO for this purpose. The tools provided by the USPTO for authoring interact with Microsoft Word and WordPerfect environments. Of the two authoring tools provided by the USPTO- PASAT and WordPerfect XML- PASAT is recommended for its additional functionality.

Patent Application Specification Authoring Tool (PASAT) is an authoring tool used in conjunction with EFS to author electronic (XML) versions of specifications, complying with USPTO specifications, with little or no previous XML knowledge. The environment of PASAT is a familiar Microsoft Word 97 or 2000 setup with a slightly modified interface to create a Specification.

For any users not utilizing Microsoft Word, the Word Perfect XML Template is an alternative authoring tool. The WordPerfect template is used to author electronic versions of the Specification in XML format.

Submission:

EFS incorporates a common "submission engine" that presents an electronic form to the applicant for the collection of Patent application information and allows the applicant to attach a tagged, structured specification document including links to applicable figure image files. Other documents included in an application, such as the Declaration, are attached as scanned single-page TIFF image files or ASCII text files. The EFS electronic Packaging and Validation Engine (ePAVE) desktop software enables Patent applicants and appointed practitioners to conduct real time electronic filing of select New Utility Patent applications.

Using USPTO developed ePAVE submission software applicants: author XML documents such as fee transmittal or application data sheet attach electronic documents and image files in specified formats and validate the completeness of the submission based on Patent business rules. The ePAVE program automatically bundles, compresses, encrypts and digitally signs the submission package once the applicant or appointed practitioner enters an electronic signature and digital certificate authentication information. After the submission package is received and validated at the USPTO without error, an Acknowledgement Receipt is displayed in real time at the filer's desktop.

Submission Specifications and Technical Limitations:

One objective of the EFS is to allow Patent applicants to file electronically the same substantive content currently filed in paper form. The current generation of EFS software allows filing of most new Utility Applications and all Pre-Grant Publication

Applications. In addition to the specific hardware/software limitations There are two types of technical limitations that users should understand: 1) The EFS takes applications that are less than 10 Megabytes before compression (for pre-grant publication, you may create and mail a CD with larger submissions) 2) EFS accepts only specific types of file formats: TIFF (Tagged Image File Format), ASCII text file Biosequence Listings, and XML documents.

What EFS Supports

- EFS supports electronic filing of new Utility Patent application parts: specification, figures, declaration, application transmittal, fee transmittal, small entity statement, if applicable, Patent application data sheet, computer readable form (CRF) sequence listing, and assignment recordation (only accepted with new Utility filing).
- EFS supports electronic filing of publication-ready Patent application information as subsequent filings for Pre-Grant publication: utility or plant specification, figures, patent application information for publication on the front page of the publication, submission transmittal and fee transmittal.
- EFS supports electronic filing of Sequence Listing(s) in computer readable form (CRF) for pending paper applications. The CRF sequence listing is to be submitted according to patent business rules in ASCII (text) file format.
- EFS supports Windows 95, Windows 98, Windows NT, and Windows 2000. You will need an Internet Service Provider or connection to use EFS.
- EFS allows for TIFF (Tagged Image File Format) files only. TIFF is a widely accepted file format. Submit image files, including figures and declarations, as TIFF files.
- EFS requires a scanner capable of producing black and white TIFF images at 300 dpi non-compressed or group 4 compression.

Application Size Limits

In November of 2000, the EFS will electronically accept new applications and Pre-Grant Publication Submissions that are less than 10 Megabytes (prior to compression by ePAVE). While EFS will allow you to produce a compact disc from an oversize Pre-Grant Publication Submission it will not currently allow submission of oversize new applications. One page of text is about 3k one image is generally less than 50k in group 4 compression format and is about 960k when in "uncompressed" format.

GETTING STARTED

Basic Steps to Patent Application Electronic Filing

The following is a general overview of the EFS process describing the course of actions needed in order to successfully complete the electronic filing of Patent applications.

- **Prepare to use EFS:**

1. Obtain a customer number and a digital certificate from the USPTO.
2. Install or upgrade to a word processing application that permits XML authoring (MS-Word 97 or Word 2000, WordPerfect 9.0).
3. Acquire software to create image files in the TIFF standard format.
4. Obtain EFS software from the USPTO.

- **To Electronically File a New Utility Patent Application:**

1. Create image files (e.g. drawings, declaration)
2. Tag the specification text using an XML word processing application (e.g. PASAT).
3. Attach drawings to the specification XML document while authoring XML document.
4. View the authored XML tagged specification document using a web browser (e.g. Internet Explorer 5.5 with TIFF viewer plug-in) and the USPTO standard style sheet format that is provided as part of the EFS authoring software -(Patent Application Specification Authoring Tool - PASAT).
5. Author tagged Patent application transmittal, fee, and application bibliographic information using the EFS submission software (electronic Packaging and Validation Engine - ePAVE).

6. Create a submission package by attaching the tagged specification XML document, the TIFF images containing scanned pages of the oath or declaration using ePAVE. ePAVE will automatically attach the transmittal, fee, and application data forms authored using ePAVE.
7. Digitally sign the submission package using ePAVE and your digital certificate.

SCENARIOS:

This section provides an explanation of the EFS terminology, the Patent application publication and EFS Submissions process, and several informative scenarios that can familiarize you with EFS.

Note Regarding Terminology:

A new application is one that is being originally filed electronically. These applications are still subject to the pre-grant publication rules, and they will also contain some information, which dictates how they will be published (i.e. early, 18 month, or not at all).

These applications will be assigned a filing date, assigned a serial number, entered into the normal flow of examination and will be published according to the same rules as a new paper filing.

A Pre-Grant submission is a submission of a copy (possibly amended or redacted) of a specification already filed at the USPTO, together with some information which dictates how it will be published. These submissions will be published but not entered into the examination process they should already have a filing date, serial number, and confirmation number. (The specification already filed in these cases is already in the examination process.) The amendments or modifications that appear in these submissions are not automatically made in the corresponding application file at the USPTO these amendments must be made according to conventional procedure.

Patent Application Publication Process and EFS Submissions:

As required by the 1999 amendments to 35 USC 122(b), the USPTO will begin publishing applications, filed on or after 11/29/2000, at 18 months after their earliest claimed priority date under 35 U.S.C. As each paper application is filed, it will be electronically captured (i.e. scanned) and assigned a projected publication date. If the applicant requests early publication and pays the publication fee, the publication date will be immediate. If the applicant requests non-publication and makes the appropriate certification no publication date will be assigned.

Four different types of EFS submissions will be added to this queue of applications: 1) New Utility Applications filed after November 29, 2000 will be added in a manner similar to new paper applications 2) "Original" redacted and amended submissions (those made before the parent application enters the 14-week print cycle) will be used to replace the data captured at the time of filing their publication dates will not be changed unless applicant newly requests early publication 3) "Republication" amended and corrected publications will be assigned an immediate publication date and 4) "Voluntary" publications of applications pending on November 29, 2000, immediately upon receipt of the request, which would otherwise not be published until they were patented.

Once per week, the application management software will create a list of cases to be published fourteen weeks later, which will include some "18-month minus 14-week" dates and some immediate publication requests. In certain circumstances, cases may be removed from this list they are not added or modified after this point. For example, applications may be abandoned to avoid publication after this fourteen-week date, and redacted cases may be submitted up to sixteen months from filing. This time frame is similar to the printing time frame currently used for issued Patents.

This schedule will become important to applicants when they are submitting amended publications. If the amended submission is made before the "18-month minus 14-week" date, the newly submitted data will replace the initially filed data at no cost (provided no request for early publication was filed). If the submission is made after this date the initial data will already be in the print queue and the new submission

will be added to the next available fourteen-week cycle as a republication this will cost \$130 for processing and \$300 for publication.

In order to publish an application or a Patent, the USPTO delivers the data to a printing contractor. Here is an approximate timeline:

- 14 weeks after filing Last chance to submit an amended copy before first publication.
- 12 weeks prior to publication Data gathered and validated at USPTO.
- 16 months from filing Last chance to submit a redacted copy and pull as filed copy.
- 4 weeks prior to publication Last chance to abandon application to avoid publication.**

** Please do not wait this long. This is the last moment for the USPTO to act on this request, not the last point the request can be mailed and have any assurance of being acted upon.

Scenario 1: Filing a New Utility Application Using EFS

Rule basis: 35 USC Sections 111,112,113 35 USC Section 122 applicable 37 CFR sections and including section 1.76 Application Data Sheet (Refer to Legal Framework for Electronic Filing posted at the EFS web site address for more rule-based information)

When: As for paper filings under 35 USC 111

Fees: As for paper filings, fees must be paid by bank card (credit card) or deposit account. Fee for early publication is \$300.

Comment: Voluntary use. Only accepting regular domestic utility applications no provisional, no design, no plant, no secrecy order (national security) applications, and no international (PCT) applications. The EFS does not accept color drawings/images. In this user manual please refer to Technical Limitations section to learn about other EFS limitations. Very large files (e.g. biotechnology utility applications) are also inappropriate for EFS. For very large Patent application files please use conventional compact discs and paper media for submission as described in 37 CFR Section 1.52.

The official copies of all documents submitted using the EFS are the paper versions printed from the electronic files received at the USPTO.

Preparation for Authoring

Prior to using the EFS software, you should assemble your Patent application information. You will need an electronic TIFF image of each drawing figure, including images such as chemical formulae or mathematical equations that will be embedded in the text of your specification. You will also need a scanned image of your declaration with the signatures of the inventor(s). You may choose to attach a scanned image of a small entity statement even though you are no longer required to do so.

For information about preparing the required image file(s) refer to the EFS Authoring and Submission user manuals or Frequently Asked Questions document. Patent Application related information such as fee information, small entity status, type of publication, non-publication request and information equivalent to that on a typical transmittal letter will be authored using the EFS submission form screens. You will not need to create image files equivalent to these types of Patent application papers because these forms are created using the ePAVE software.

GENERAL QUESTIONS:

May I electronically file a Patent application specification along with Patent application information for publication based on an originally filed application that has been amended during prosecution?

Yes, applications that have been amended during prosecution can be substituted for the originally filed application if they are submitted in compliance with the electronic filing system technical specifications and timely filed. Refer to the Manual of Patent

Examining Procedures 37 CFR 1.215 (c). Note: EFS submission of the patent application information to be published is a separate filing from the paper filing of the amendment in the course of prosecution.

May I electronically file a request for non-publication of my previously filed Patent application?

No, the Manual of Patent Examining Procedures (37 CFR 1.213) states that requests for non-publication must be made at the time the Patent application is filed at the USPTO. You may abandon your application by filing a paper to avoid publication. **Note:** Any express abandonment must be received at least four weeks prior to the projected publication date.

What electronic file size limit is there when using EFS?

EFS Submissions must be smaller than 10 megabytes, approximately 2,000 typewritten pages.

Can I file my application both in paper and electronically on the same day so that I am sure that I will get my filing date?

No. You must file either a paper Patent application OR use EFS to file a New Utility Patent application electronically. Duplicate filings will result in duplicate applications with different serial numbers.

May I electronically file a New Utility Patent application over 10 MB on CD-ROM, CD-R?

No. You cannot submit the New Utility Patent application documents authored as an EFS submission on CD-ROM or CD-R to the USPTO.

FILE FORMATS:

Is there an EFS file naming standard to be followed?

Yes, it is recommended that the xml, text, and image file names you submit to the USPTO via EFS begin with a letter and do not include any symbols.

Why is it unacceptable to electronically file an application saved in Portable Document Format (PDF)?

The benefits of electronic filing of Patent application submissions can be achieved only if the process is standardized so that file formats submitted to USPTO can be readily received, used by USPTO information systems and maintained for the full retention life of the Patent application.

PDF is a proprietary file format maintained by a single vendor that makes its use over an extended period of time problematic. The ability to transfer PDF electronic Patent application documents to a new technology environment is constrained and requires extra outlays of resources. Identifying an international standards for marking up (tagging data) such as XML (eXtensible Mark-up Language) as the required output to be provided to USPTO supports a single file format that can create, store, and accurately render the content and structure of all electronic records contained in a Patent application. XML output from desktop office productivity applications in XML format can be integrated at no or low cost as a viewing/navigation/reproduction capability into Internet browsers and desktop productivity applications. XML is currently a preferred file format for

conducting electronic commerce.

How do I include my drawings in an electronically filed application?

Drawings are included in electronically filed applications as tagged image file format (TIFF) images when you author the specification document. Drawings on paper can be scanned and saved as TIFF image files, or drawings can be created using electronic drafting tools and saved individually in the TIFF file format. Each figure should be saved as its own tiff image. Refer to the EFS Authoring and Submission user manuals for more details.

My invention can only be illustrated using micrographs. Can I submit my application via EFS?

Yes, upon conversion of the micrographs to black and white TIFF image files. In addition, you must submit three copies of the photographs and the appropriate petition and fees, via mail, according to the current standard US practice.

Why do we have to use TIFFs?

Patent applications must be archivable. For this reason, only non-proprietary and stable formats may be used for electronic Patent files. TIFF is both non-proprietary and retains integrity when compressed (for transmission and storage) or archived. This format is also viewable in a wide variety of software packages.

Why can't we use JPEG file format?

JPEG files may cause a loss of data when compressed and/or archived. Some compression algorithms simplify images to compress them, which results in an image that has lost some data.

What are the requirements for converting/scanning to TIFF?

TIFF images must be: black and white 300 dpi non-compressed OR Group 4 compression. We also recommend cropping each graphic image to reduce the surrounding white space.

What about color images or different image file types (JPEG, GIF, etc.)?

Currently EFS is accepting images in black and white TIFF format only. In the future EFS technical standards will be updated as needed to accommodate filing color images and use of other standard file formats.

Two issues that limit the file types we will accept are proprietary file types and loss of data during compression. That is, the native output of some programs is not readily readable without the program itself, and some compression algorithms (such as jpeg) simplify images to compress them, which results in an image that has lost some data.

FIGURES OF DRAWINGS, CHEMICAL STRUCTURES, AND MATH FORMULAE IN EFS:

How do I add my figures to my submission?

In the PASAT authoring tool the Figure Manager assists you with adding and removing Figures and moving them relative to one another. A thumbnail of each figure will appear

as the Figure is added. Clicking on the thumbnail will show the file name at the top of the Figure Manager window.

I need to add another Figure. How do I add it?

In the PASAT authoring tool, use the Figure Manager. Select the figure that you would like your next figure to follow. Select the **Add Below** button and attach the new figure file.

I attached a Figure twice. How do I delete the second occurrence?

In the PASAT authoring tool, use the Figure Manager, click on the thumbnail of the second occurrence, and then click the **Remove** button. In the WordPerfect XML Template use the XML Tree. Double-click on the Figure tag of the second occurrence, and press the **Delete** key. You must also remove the image reference from the Insert/File References list. See the authoring tool user manuals for detailed instructions.

I create my drawings using AutoCAD. Can I submit these with my electronic applications?

Yes, if you save the drawings as TIFF images. TIFF images have a file extension of tiff.

I create my drawings using Visio. Can I submit these with my electronic application?

Yes, if you save the drawings as TIFF images.

My application includes a table. How do I include this data?

Tables may be inserted into the specification document as TIFF images. Alternatively, the PASAT authoring tool provides a capability to create a table within the XML specification document.

How do I insert chemical formulas into an EFS submission?

Complex work units such as chemical formulas, mathematical equations and some tables should be saved as TIFF images and inserted into the submission document. The EFS ePAVE software will bundle these files with the specification for submission to the USPTO.

I use ChemDraw to create chemical structures. Can I submit these files with my electronic application?

ChemDraw Ultra 6.0 and ChemDraw Pro 6.0 allow you to save your structures in TIFF format. The TIFF image files created from ChemDraw are suitable for submission via EFS.

What graphics software can be used to produce TIFF images?

Imaging for Windows, which is distributed as a part of Microsoft Windows®, can be used to save TIFF images as can Visio, Star Office, Autodesk AutoCAD, MatLab, Corel Draw, Corel Photohouse, Adobe Illustrator and many other software packages.

How many figures will the EFS accept?

The limitation on number of figures is a memory limitation rather than a specific number

of figures. A TIFF image in Group 4 compression takes from about 3 kb to about 300 kb depending on the level of detail in the Figure. The number of drawings that you can submit will depend on the length of your specification text and the electronic size of your TIFF files.

How many figures-per-image will EFS require?

EFS requires one figure per image. The specification will be authored using an XML authoring capability. The image file for each drawing/figure will be tagged within the specification document.

My application contains many superscripts and subscripts. Do I have to tag each occurrence?

If you type your application directly into the template, then each superscript and subscript must be tagged in the same manner that these characters were formatted in the word processing environment. If you have a previously prepared document, when you copy text from that document into the PASAT authoring tool, the PASAT authoring tool will recognize the special formatting and insert the appropriate tags.

My application contains many special characters like Greek letters. How will I insert these into my authored Patent application specification?

The PASAT authoring tool has a drop down menu in the authoring tool to allow you to insert identified special characters into your document if you are typing directly into the authoring tool template. If you are copying and pasting from a previously prepared document, the authoring tool will attempt to recognize the special character and paste it into the template. If the authoring tool cannot recognize the character, it will replace it with a readily identifiable character. Use the **Find** function to locate these instances and insert the desired characters from the drop down menu.

The EFS approach to special characters is to use a character entity reference. Details about special characters and how they are handled in EFS can be found in the EFS authoring user manuals.

The EFS supports the Lucida Sans Unicode font which covers most commonly used characters.

Are the same drawing standards applied to EFS submissions as with paper submissions?

Yes. New Utility Patents Applications submitted through EFS will have scanned TIFF images printed and the drawing standards applied under 37 CFR 1.84. With respect to Pre-Grant Publication submission, the TIFF images of the figures will be reviewed and a determination of their suitability for publication made. If the figures are not suitable for publication, the applicant will be notified.

Should I crop my TIFF images?

Yes. If you crop your image your image either in-line or figure at the end will be applied by the style sheet to your web browser accurately. By cropping you avoid double margins being applied to the images (one margin from the scan and another margin from your web browser) and cropping eliminates white space between the image and other contents in your specification.

How are the drawing requirements as set forth in 37 CFR 1.84 applied in EFS?

The requirements of the TIFF image: 300 dpi black & white non-compressed OR Group 4 compression will allow the applicant to submit images that will satisfy all the quality requirements under 37 CFR 1.84. The USPTO with your web browser & TIFF viewer plug-in will use the following margins on an 8 1/2" by 11" paper:

- Top 1"
- Left 1"
- Right 3/4"
- Bottom 3/4"

These Margins satisfy 37 CFR 1.84 (g)

What margin settings should I set for specification and the drawings?

The margins that will applied to both the specification and the drawings on an 8 1/2" by 11" paper:

- Top 1"
- Left 1"
- Right 3/4"
- Bottom 3/4"

These Margins satisfy both 37 CFR 1.84 (g) and 37 CFR 1.52 (a) (1) (ii). You may set up your Web browser for these margins by choosing FILE and then PAGE SETUP so your printed copy of the specification and drawing will have these same margins.

What if I have multiple applicants that are assigning rights to different receiving individuals or entities?

In this software release, only one assignment form can be completed and attached to a new utility submission. For example inventor # 1 works for the XYZ company and assigns all rights to this company, inventor # 2 works for ABC Company and assigns all rights to this company. This would require 2 different cover sheet submissions and therefore cannot be submitted through EFS at this time. You will not be able to file an assignment form with a pre-grant submission.

TYPES OF SUBMISSIONS THAT CAN BE FILED WITH EFS:

What type of submissions can be filed with EFS?

EFS can be used to submit:

New Utility Applications

Biosequence listings

Pre-Grant Publication Submissions in applications where the applicant wants an amended, redacted, voluntary, and/or republication to be published per 37 CFR 1.211, 1.215(c), 1.217(b), and 1.221.

EFS does not accept:

New plant applications

Design applications

Reissue applications

Provisional applications

International (PCT) applications

Reexamination requests

When will I be able to use EFS to electronically file all Patent application related documents?

It is a goal of the USPTO to ultimately accept all Patent application submissions electronically. Each EFS release will add additional filing capability, until all application related documents can be electronically authored and filed.

Can I use EFS to file a Trademark application?

No, use the TEAS system to file trademark applications. You can access the Trademark Electronic Application System from the USPTO web site at www.uspto.gov

May I use EFS to submit a Computer Readable Form Biosequence Listing for a pending paper application?

Yes, this capability is available as an EFS filing.

You must have:

- Received an application serial number for a previously filed paper biotechnology utility application for which an electronic Computer Readable Form (CRF) biosequence listing is due.
- Generated a CRF Biosequence Listing ASCII Text file for the previously filed Patent application using PatentIn or another existing biosequence listing authoring tool.
- Requested and received a customer number and digital certificate information from USPTO.
- Installed the necessary USPTO Direct Security software on your PC to create the certificate.
- Installed the ePAVE software on your PC.

Can I file a U.S. application through EFS from another country?

Yes, but an electronic filer must meet the USPTO business requirements for filing and prosecuting a U.S. Patent application. Prior to using EFS software a digital certificate and customer number must be obtained. For example, a pro se inventor in the Germany who got a customer number and digital certificate could submit from Germany. A Canadian attorney who has a U.S. registration number, a customer number, and a digital certificate could submit from Canada. Attorneys or agents must be registered with the USPTO to represent inventors. Use of EFS submission software is subject to export and import restrictions relating to cryptographic software.

Can I submit a request for Abandonment of a Patent Application using EFS?

No. Requests for Abandonment should be filed in paper.

Can I submit an information disclosure statement using EFS?

No. Not at this time.

Source: The United States Patent and Trademark Office

Copyrights- Library of Congress

General Information

Copyright is a form of protection provided by the laws of the United States to the authors of “original works of author-ship,” including “pictorial, graphic, and sculptural works.”

The owner of copyright in a work has the exclusive right to make copies, to prepare derivative works, to sell or distribute copies, and to display the work publicly. Anyone else wishing to use the work in these ways must have the permission of the author or someone who has derived rights through the author.

Copyright Protection Is Automatic

Under the present copyright law, which became effective Jan. 1, 1978, a work is automatically protected by copyright when it is created. A work is created when it is “fixed” in a copy or phonorecord for the first time. Neither registration in the Copyright Office nor publication is required for copyright protection under the present law.

Advantages to Copyright Registration

There are, however, certain advantages to registration, including the establishment of a public record of the copyright claim. Copyright registration must generally be made before an infringement suit may be brought. Timely registration may also provide a broader range of remedies in an infringement suit.

Copyright Notice

Before March 1, 1989, the use of a copyright notice was mandatory on all published works, and any work first published before that date should have carried a notice. For works first published on or after March 1, 1989, use of the copyright notice is optional.

Registration

Information concerning registration, necessary forms and a list of materials that should be included for registration can be found at the Library of Congress website:

Source: <http://www.loc.gov/copyright>.

Or can be obtained by mail:

Library of Congress
Copyright Office
101 Independence Avenue, S.E.
Washington, D.C. 20559-6000

Publication

The copyright law defines “publication” as: the distribution of copies of a work to the public by sale or other transfer of ownership or by rental, lease, or lending. Offering to distribute copies to a group of persons for purposes of further distribution or public display also constitutes publication. A public display does not of itself constitute publication. A work of art that exists in only one copy, such as a painting or statue, is not regarded as published when the single existing copy is sold or offered for sale in the traditional way, for example, through an art dealer, gallery, or auction house.

A statue erected in a public place is not necessarily published. When the work is reproduced in multiple copies, such as reproductions of a painting or castings of a statue, the work is published when the reproductions are publicly distributed or offered to a group for further distribution or public display. Publication is an important concept in copyright because, among other reasons, whether a work is

published or not may affect the number of copies and the type of material that must be deposited when registering the work. In addition, some works published in the United States become subject to mandatory deposit in the Library of Congress. These requirements are explained elsewhere in this circular.

Works of the Visual Arts

Copyright protects original “pictorial, graphic, and sculptural works,” which include two-dimensional and three-dimensional works of fine, graphic, and applied art. The following is a list of examples of such works:

- Advertisements, commercial prints, labels
- Artificial flowers and plants
- Artwork applied to clothing or to other useful articles
- Bumper stickers, decals, stickers
- Cartographic works, such as maps, globes, relief models
- Cartoons, comic strips
- Collages
- Dolls, toys
- Drawings, paintings, murals
- Enamel works
- Fabric, floor, and wall-covering designs
- Games, puzzles
- Greeting cards, postcards, stationery
- Holograms, computer and laser artwork
- Jewelry designs
- Models
- Mosaics
- Needlework and craft kits
- Original prints, such as engravings, etchings, serigraphs, silk screen prints, woodblock prints
- Patterns for sewing, knitting, crochet, needlework
- Photographs, photomontages
- Posters
- Record jacket artwork or photography
- Relief and intaglio prints
- Reproductions, such as lithographs, collotypes
- Sculpture, such as carvings, ceramics, figurines, marquettes, molds, relief sculptures
- Stained glass designs
- Stencils, cut-outs
- Technical drawings, architectural drawings or plans, blue-prints, diagrams, mechanical drawings
- Weaving designs, lace designs, tapestries
- Copyright protection extends to the design of a building created for the use of human beings.

Useful Articles

A “useful article” is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information. Examples are clothing, furniture, machinery, dinnerware, and lighting fixtures. An article that is normally part of a useful article may itself be a useful article, for example, an ornamental wheel cover on a vehicle.

Copyright does not protect the mechanical or utilitarian aspects of such works of craftsmanship. It may, however, protect any pictorial, graphic, or sculptural authorship that can be identified separately from the utilitarian aspects of an object. Thus, a useful article may have features both copyrightable and uncopyrightable. For example, a carving on the back of a chair or a floral relief design on silver flatware could be protected by copyright, but the design of the chair or flatware itself could not.

Some designs of useful articles may qualify for protection under the federal patent law.

For further information, contact the

Patent and Trademark Office at Commissioner
of Patents and Trademarks
Washington, D.C. 20231
or via

Internet at <http://www.uspto.gov>.

The telephone number is (800) 786-9199

and the TTY number is (703) 305-7785.

The automated information line is (703) 308-4357.

Copyright in a work that portrays a useful article extends only to the artistic expression of the author of the pictorial, graphic, or sculptural work. It does not extend to the design of the article that is portrayed. For example, a drawing or photograph of an automobile or a dress design may be copyrighted, but that does not give the artist or photographer the exclusive right to make automobiles or dresses of the same design.

Mandatory Deposit for Works Published in the United States

Although a copyright registration is not required, the 1976 Copyright Act establishes a mandatory deposit requirement for works published in the United States. In general, the owner of copyright or the owner of the exclusive right of publication in the work has a legal obligation to deposit in the Copyright Office within 3 months of publication in the United States **two** complete copies or phonorecords of the best edition. It is the responsibility of the owner of copyright or the owner of the right of first publication in the work to fulfill this mandatory deposit requirement. Failure to make the deposit can result in fines and other penalties but does not affect copyright protection.

Some categories of pictorial, graphic, and sculptural works are exempt from this requirement, and the obligation is reduced for other categories. The following works are **exempt** from the mandatory deposit requirement:

- Scientific and technical drawings and models
- Greeting cards, picture postcards, and stationery
- Three dimensional sculptural works, except for globes, relief models, and similar cartographic works
- Works published only as reproduced in or on jewelry, toys, games, textiles, packaging material, and any useful article
- Advertising material published in connection with articles of merchandise, works of authorship, or services
- Works first published as individual contributions to collective works (but not the collective work as a whole)
- Works first published outside the United States and later published without change in the United States, under certain conditions.

Serials

For copyright purposes, serials are defined as works issued or intended to be issued in successive parts bearing numerical or chronological designations and intended to continue indefinitely. The classification “serial” includes periodicals, newspapers, magazines, bulletins, newsletters, annuals, journals, proceedings of societies, and other similar works.

Use Form SE to register a Serial

Serials should be registered on Form SE, using standard Form SE, Short Form SE, or Form SE/Group. You can obtain these forms and other forms and circulars by sending a specific request, identifying the number of forms you need, to:

**Library of Congress
Copyright Office
Publications Section, LM-455
101 Independence Avenue, S.E.
Washington, D.C. 20559-6000**

or by calling the Forms and Publications Hotline (202)707-9100 and leaving a recorded message.

Forms are also available from the Copyright Office Website at <http://www.loc.gov/copyright>.

A copyright registration is effective on the date the Copyright Office receives all the required elements in acceptable form, regardless of how long it then takes to process the application and mail the certificate of registration.

The time the Copyright Office requires to process an application varies depending on the amount of material the Office is receiving.

If you apply for copyright registration, you **will not** receive an acknowledgment that your application has been received (the Office receives more than 600,000 applications annually), but you can expect:

- A letter or a telephone call from a Copyright Office staff member if further information is needed or
- A certificate of registration indicating that the work has been registered, or if the application cannot be accepted, a letter explaining why it has been rejected.

If you want to know the date that the Copyright Office receives your material, send it by registered or certified mail and request a return receipt.

If you plan to register many successive claims to copyright, you may wish to open a deposit account in the Copyright Office from which the fee for each registration and other services may be paid.

Authorship

Copyright Begins With the Author at Creation

At the time an original work is created in fixed form, copyright is automatically secured. At that moment, all the rights in that copyright belong to the author of the work. Those rights remain with the author unless the author specifically transfers them, in writing, to someone else. Ownership of the rights can change, but the author of the work remains the same regardless of who subsequently owns the rights.

Work Made for Hire

Ordinarily, the person who actually creates the work is considered the author. However, the copyright law provides that in the case of a “work made for hire,” the **employer** is the “author” of the work and is therefore the initial owner of copyright unless the parties have expressly agreed otherwise.

A “work made for hire” is either:

- “A work prepared by an employee within the scope of his or her employment,” or
- Under certain conditions as defined by the copyright law (section 101), a “specially ordered or commissioned work” where the parties have agreed in writing that the commissioned work shall be considered a “work made for hire.” This category includes works commissioned for use as contributions to collective works.

Collective Works

Most serials are collective works in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole. Two categories of authorship are inherent in the creation of collective works:

- Authorship of the collective work as a whole, and
- Authorship of the individual contributions to the collective work.

Authorship of the collective work as a whole includes the elements of revising, editing, compiling, and similar authorship that went into putting the work into final form.

The author of a serial issue as a whole is sometimes an individual person. More typically, however, the author is the organization (corporation, society, club) that directed the preparation of the entire serial issue as a “work made for hire.” In this case, the employer’s authorship includes not only the collective authorship (described above) but also any individual contributions that employees of the employer prepare while working within the scope of their employment.

The Claimant and the extent of the Claim

The copyright claimant is the person, organization, or legal entity authorized to claim copyright in the serial issue. The claimant is the author or the person or organization to whom all rights have been transferred. The claimant registering a serial may claim copyright not only in the collective-work authorship for which the claimant is responsible but also in any independently authored contributions in which all rights have been transferred to the claimant by the contributors.

If the serial issue includes any independently authored contributions in which all rights have **not** been transferred by the contributor to the claimant for the serial issue as a whole, those contributions are not included in the claim being registered, because the claimant in these contributions is different from the claimant in the entire serial issue.

A separately authored contribution **can**, however, be registered for copyright independently. To register such a contribution, the contributor should file a separate claim using Form TX or other appropriate application form.

International Copyright

There is no such thing as an “international copyright” that will automatically protect an author’s writings throughout the world. Protection against unauthorized use in a particular country basically depends on the national laws of that country. However, most countries offer protection to foreign works under certain conditions that have been greatly simplified by international copyright treaties and conventions. There are two principal international copyright conventions, the Berne Union for the Protection of Literary and Artistic Property (Berne Convention) and the Universal Copyright Convention (UCC).

The United States became a member of the Berne Convention on March 1, 1989. It has been a member of the UCC since September 16, 1955. Generally, the works of an author who is a national or domiciliary of a country that is a member of these treaties or works first published in a member country or published within 30 days of first publication in a Berne Union country may claim protection under them. There are no formal requirements in the Berne Convention. Under the UCC, any formality in a national law may be satisfied by the use of a notice of copyright in the form and position specified in the UCC. A UCC notice should consist of the symbol © (C in a circle) accompanied by the year of first publication and the name of the copyright proprietor (example: © 1995 John Doe). This notice must be placed in such manner and location as to give reasonable notice of the claim to copyright. Since the Berne Convention prohibits formal requirements that affect the “exercise and enjoyment” of the copyright, the United States changed its law on March 1, 1989 to make the use of a copyright notice optional. U.S. law however, still provides certain advantages for use of a copyright notice for example, the use of a copyright notice can defeat a defense of “innocent infringement.”

Even if the work cannot be brought under an international convention, protection may be available in other countries by virtue of a bilateral agreement between the U.S. and other countries or under specific provision of a country’s national laws. (See generally

Circular 38a International Copyright Relations of the United States.)

An author who wishes copyright protection for his or her work in a particular country should first determine the extent of protection available to works of foreign authors in that country. If possible, this should be done before the work is published anywhere, because protection may depend on the facts existing at the time of first publication.

There are some countries that offer little or no copyright protection to any foreign works. For current information on the requirements and protection provided by other countries, it may be advisable to consult an expert familiar with foreign copyright laws.

The U.S. Copyright Office is not permitted to recommend agents or attorneys or to give legal advice on foreign laws.

*All above information is available through the USPTO and Library of Congress
Source: The United States Library of Congress*

IMPORTANT LINKS

USPTO Standards:

www.uspto.gov/web/offices/pac/doc/general/drawing.htm

www.uspto.gov/web/offices/pac/doc/general/specifi.htm

www.uspto.gov/web/offices/pac/doc/general/design.htm

Manual of Patent Examining Procedures- MPEP

EFS:

www.uspto.gov/ebc/efs/downloads/documents.htm

www.uspto.gov/ebc/efs/

SBA:

www.sba.gov/starting/indextrademarks.html

USPTO Document Disclosure Program:

www.uspto.gov/web/offices/pac/disdo.html

Provisional Application:

www.uspto.gov/web/offices/pac/provapp.htm

USPTO Press release:

www.uspto.gov/web/offices/com/speeches/01-13.htm

USPTO plant patents:

www.uspto.gov/web/offices/pac/doc/general/plant.htm

www.uspto.gov/web/offices/pac/plant/index.html

Basic facts on PCT:

www.uspto.gov/web/offices/pac/dapps/pct/wipo.htm

WIPO:

www.loc.gov/copyright/wipo/

URAA, GATT amendments:

www.loc.gov/copyright/gatt.html

Guide for filing Design Patents:

www.uspto.gov/web/offices/pac/design/definition.html

www.uspto.gov/web/offices/pac/design/disclosure.html

www.uspto.gov/web/offices/pac/design/design.html

www.uspto.gov/web/offices/pac/design/drawing.html

www.uspto.gov/web/offices/pac/design/laws.html

www.uspto.gov/web/offices/pac/design/rules.html

www.uspto.gov/web/offices/pac/design/sample.html

Guide for filing Utility Patents:

www.uspto.gov/web/offices/pac/utility/utility.htm

Trademarks:

www.uspto.gov/web/offices/tac/doc/basic/index.html

www.uspto.gov/web/offices/tac/doc/basic/basic_facts.html

www.uspto.gov/web/offices/tac/doc/basic/registration.html

www.uspto.gov/web/offices/tac/doc/basic/filing_req.html

www.uspto.gov/web/offices/tac/doc/basic/written_app.html

www.uspto.gov/web/offices/tac/doc/basic/drawing.html

www.uspto.gov/web/offices/tac/doc/basic/fees.html

www.uspto.gov/web/offices/tac/doc/basic/specimens.html

www.uspto.gov/web/offices/tac/doc/basic/additional_req.html

TEAS-

TESS-

USPTO Classifications Index:

www.uspto.gov/web/offices/ac/ido/oeip/taf/moc/index.htm

Patent Cafe:

www.cafezine.com

www.cafezine.com/news_template.asp?id=497&deptid=8

IP Search Engine:

www.ipsearchengine.com/index.asp?from&id=buy

www.ipsearchengine.com/tour/tour.asp?touroption=using#javascript

USPTO Independent Inventor Resources:

www.uspto.gov/web/offices/com/iip/index.html

www.uspto.gov/web/offices/com/iip/data.htm

USPTO Patent Attorneys:

www.uspto.gov/web/offices/dcom/olia/oed/roster/

QUESTEL ORBIT- Tami Hurley:

thurley@questel.orbit.com

US Copyright office:

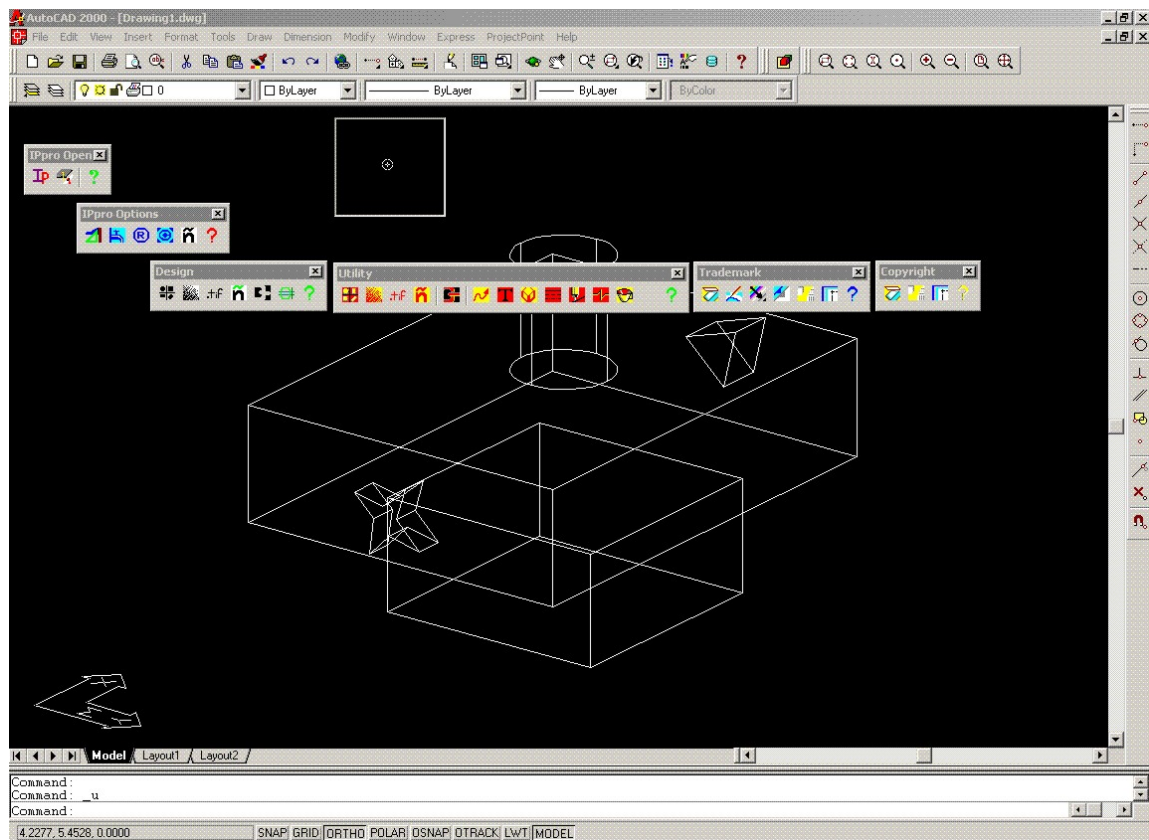
Lcweb.loc.gov/copyright/

www.loc.gov/copyright/reg.html

www.loc.gov/copyright/circs/index.html

P102 Understanding and preparing Design Patents graphics

This is the complete set of IP-Docs Toolbars as they would appear in AutoCAD if they were to be opened all at once.



The Toolbars are used as follows



START IP-Docs: This icon is used to start the IP-Docs code operating. It opens the IP-Docs Options TOOLBAR and then closes the IpPro open TOLBAR (where it resides)



START the IP-Docs TUTORIALS: This icon is used to start tutorials, it is context sensitive, if it is selected before any of the subset icons, the tutorials begin from the beginning and can be followed through their entirety, if it is selected when any of the subset software is active, the tutorial starts with that group of training information and animations.



START IP-Docs general questions, top level help. This icon will take you to the top of the index help screen (search for help by topic) and give access to the web site help.



START the DESIGN TOOLBAR. This icon is accessed from the IP-Docs Options TOOLBAR. Selecting this icon opens the DESIGN patent TOOLBAR and closes the IP-Docs options TOOLBAR.

Selecting this icon prompts the user to enter a Project name and filename for the Design Patent project. A subdirectory is then created with that Project name and a complete copy of the model and or 2D drawings in MODELSPACE are WBLOCKed to that new file name under that new subdirectory
The Design Patent template (PAPERSPACE tabs etc.) is inserted.



START the UTILITY TOOLBAR. This icon is accessed from the IP-Docs Options TOOLBAR. Selecting this icon opens the UTILITIES patent TOOLBAR and closes the IP-Docs options TOOLBAR.

Selecting this icon prompts the user to enter a Project name and filename for the Utility Patent project. A subdirectory is then created with that Project name and a complete copy of the model and or 2D drawings in MODELSPACE are WBLOCKed to that new file name under that new subdirectory
The Utility Patent template (PAPERSPACE tabs etc) is inserted.



START the TRADEMARK TOOLBAR. This icon is selected from the IP-Docs Options TOOLBAR. Selecting this icon opens the TECHNICAL TOOLBAR and closes the IP-Docs Options TOOLBAR.

Selecting this icon prompts the user to enter a Project name and filename for the Trademark project. A subdirectory is then created with that Project name and a complete copy of the model and or 2D drawings in MODELSPACE are WBLOCKed to that new file name under that new subdirectory.
The Trademark template (PAPERSPACE tabs etc) is inserted.



START the COPYRIGHT TOOLBAR. This icon is selected from the IP-Docs Options TOOLBAR. Selecting this icon opens the COPYRIGHT TOOLBAR and closes the IP-Docs Options TOOLBAR.

Selecting this icon prompts the user to enter a Project name and filename for the Copyright project. A subdirectory is then created with that Project name and a complete copy of the model and or 2D drawings in MODELSPACE are WBLOCKed to that new file name under that new subdirectory.
The Copyright template (PAPERSPACE tabs etc) is inserted.



OPENS the SELECT COUNTRIES popup window (VB?). This icon is selected from the IP-Docs Options TOOLBAR. Selecting this icon opens the SELECT COUNTRIES but does not close the IP-Docs Options TOOLBAR.

The VB window advises the user not to create multiple country copies unless the primary country (US) patent is complete for reasons of efficiency.

If the user chooses another country before a project is started, the primary or first patent copyright or trademark document will be for that country.



This icon sends the user to a help menu designed to help them select within the IP-Docs Options TOOLBAR among the two basic types of patents, copyrights, trademarks, as well as how to use the multiple country option most efficiently.

The toolbar also describes the on demand training program options.

Design Patent



Opens a VB window that lets the user choose their initial view, one of six standard orthographic projections, or one of eight oblique views, once a view is chosen the window is closed and that view is presented in the MVIEW window in the document, the operator is prompted to adjust the view using the ORBIT option then press return to confirm the view.

The system does a 3D to 2D conversion and prompts the user to begin choosing options that are not grayed out on the Design toolbar.

Choosing the option again offers the user the opportunity to create additional sheets and select new views in those sheets as well.

The process continues until all required views are created.

The process ends when the user chooses the (.tif) icon to output their work.



Selection of this icon opens the modified BHATCH options window that offers the user a selection of custom, specific Design Patent shaders as specified by the USPTO. They can be applied and interactively scaled and reviewed before application

Some custom programming will be required here as AutoCAD has no graduated tone fill and this must offer it as an option, at least a fine stipple effect that is island sensitive.

Transparent symbol lines (3-5 short lines set at 45 degrees of the horizontal as well as parallel horizontal and vertical lines will be required also, see USPTO spec sheet.



This icon starts a review process, it opens the AutoCAD standard PLOT window which allows the current country version of the Design Patent to be reviewed and remains open until the CANCEL or a plot option is chosen.

Hard copy can be chosen from a plot style what will print the images (all sheets) as well as call-up and print the corresponding documents from MSWord.

A Design Patent plot style will become current in the plot window. It can be chosen and it will author both the images and text together (hopefully after it has been corrected and approved by a patent attorney, and will sent it to the USPTO in Electronic Submission Format (in the case of a Design Patent).

The drawing(s) will be saved and date stamped along with the text document(s), the then-current document will be saved to the same name, different rev. letter (b,c,d, etc)

If the copy is unregistered, then all hard copies will have UNREGISTERED or BOOTLEG SOFTWARE printed across them diagonally in bold print.

If an attempt is made to submit electronically, the software will send a notice to our website, (with user information collected from the machine), so we can bill the user.



This icon will open the VB window that offers a list of countries, thirteen will be offered as "most frequently accessed" and the remainder of the countries patent formats will be available to users off the web

site to add in on demand through an automatic (.exe) file upgrade, one country at a time.

Once the first set of documents is complete, additional countries can be chosen. Text in the drawings as well as text in the text documents will be translated to the language of that country.

Graphics will be reformatted for those countries chosen in addition to the primary country (first completed). These will be generated using a set of algorithms that will resize, re-scale and turn on and off various country specific details including but not limited to image size, hatch patterns and shaders, and outlines.

Each country will have to be made current one at a time and reviewed/plotted and/or electronically filed as required.



This icon is selected after all other lines and shaders have been applied. Selecting one item at a time a number is assigned to each object to be named or specified (disclosed). The number has a hot zone, double clicking in this hot zone will open the text document at the point where the hot link is current for additional annotation to be added. The number assigned is hot linked to the corresponding number in the connected text document.

The hot link is bi-directional such that double clicking the item in the text will open and highlight (possibly zoom a window around) the referenced object.



Selecting this icon will allow the user to choose items that will be shown for clarification but are not included in the patent being applied for.

These items will be treated in a special manner, they will be changed to a hidden layer where the LINETYPE of all elements will be changed to HIDDEN. Those objects which are behind the claimed portion, will be hidden in a normal manner. Those items that are to be presented over-top-of the claimed item will be "hidden" themselves but superimposed over the claimed item(s) and not hide those items behind them. This may have to be created in several separate operations and superimposed in layers.



Help specific to Design Patents

P103 Understanding and preparing Design Patent text documents for the patent attorney

Ljl

P104 Understanding and Preparing Utility Patent graphics

Utility Patent



Opens a VB window that lets the user choose their initial view, one of six standard orthographic projections, or one of eight oblique views, once a view is chosen the window is closed and that view is presented in the MVIEW window in the document. The operator is prompted to adjust the view using the ORBIT option or press return to confirm the view.

The system does a 3D to 2D conversion and prompts the user to begin choosing options that are not grayed out on the Utility toolbar.

Choosing the option again offers the user the opportunity to create additional sheets and select new views in those sheets as well.

The process continues until all required views are created.

Unresolved: In some cases two or more views can be placed on a page, do we create separate templates and

have the view selector only act on the current DVIEW window?

Can we have a 2-and 3 view option in the selection window and if the operator selects/highlights two or more views a view option VB window will open as well?



Selection of this icon opens the modified BHATCH options window that offers the user a selection of custom, specific Utility Patent shaders as specified by the USPTO. They can be applied and interactively scaled and reviewed before application

Some custom programming will be required here as AutoCAD has no graduated tone fill and this must offer it as an option, at least a fine stipple effect that is island sensitive.

Transparent symbol lines (3-5 short lines set at 45 degrees of the horizontal as well as parallel horizontal and vertical lines will be required also, see USPTO spec sheet.



This icon starts a review process, it opens the AutoCAD standard PLOT window which allows the current country version of the Design Patent to be reviewed and remains open until the CANCEL or a plot option is chosen.

Time and resources permitting: The review could show all possible printable sheets, graphic and text documents, in "slide mode". The operator can pick a specific slide and have a full screen preview of that slide. A facility to switch between slide and full screen review mode would be nice)

Hard copy can be chosen from a plot style that will print the images (all sheets) as well as call-up and print the corresponding documents from MSWord.

A Utility Patent plot style will become current in the plot window. It can be chosen and it will author both the images and text together (hopefully after it has been corrected and approved by a patent attorney, and will send it to the USPTO in Electronic Submission Format (in the case of a Utility Patent).

The drawing(s) will be saved and date stamped along with the text document(s), the then-current document will be saved to the same name, different rev. letter (b,c,d, etc)

If the copy is unregistered then all hard copies will have UNREGISTERED or BOOTLEG printed across them diagonally in bold print.

If an attempt is made to submit electronically, the software will send a notice to our website, (with user information collected from the machine), so we can bill the user.



This icon will open the VB window that offers a list of countries, thirteen will be offered as "most frequently accessed" and the remainder of the countries' patent formats will be available to users off the web site to add-in, on-demand through an automatic (.exe) file upgrade, one country at a time.

Once the first set of documents is complete, additional countries can be chosen. Txt in the drawings as well as text in the text documents will be translated to the language of that country.

Graphics will be reformatted for those countries chosen in addition to the primary country (first completed). These will be generated using a set of algorithms that will resize, re-scale and turn on and off various country specific details including but not limited to image size, hatch patterns and shaders, and outlines.

Each country will have to be made current, one at a time, and reviewed/plotted and/or electronically filed as required.



This icon is selected after all other lines and shaders have been applied. Selecting one item at a time a number is assigned to each item to be named or specified (disclosed). The number has a hot zone, double clicking in this hot zone will open the text document Bill of Materials Template at the point where the hot linked number is located. Additional annotation can then be added i.e item name, quantity, etc.

The number assigned is hot linked to the corresponding number in the connected text document.

The hot link is bi-directional such that double clicking the item in the text will open and highlight (possibly zoom a window around) the referenced object.



This icon opens a VB window that offers a limited set of QLEADER commands with the SPLINE option turned on. Line type of the leader line and boxed text rather than plain are offered as closing options. All other leader and dimension options are shut down (blocked) while in this command.

A tool tip on the box will warn the operator that those leaders offered are the only ones acceptable to the USPTO and should not be overwritten.



This icon opens a box that offers a limited selection of three type styles offered to the user that are acceptable to the USPTO for the Utility patent.



This icon offers the user the opportunity to add highlighted (heavier weight) lines to the objects. USPTO limits the light source to be from the upper left, therefore creating heavy or shadow lines on all edges encountered traveling diagonally across the picture plain from lower right to upper left. Once the software algorithm has selected (marquee selected and highlighted) all the lines it thinks are appropriate, the command prompt will read "select additional lines?" additional lines can be added by picking (automatic start of the "add" selection set option", window or crossing select, "r" will allow removal of improperly selected lines. Once the selection set is complete, RETURN will OFFSET the selected lines half the chosen line width and apply the WIDTH option of PEDIT to all the chosen lines.

Accumulation of multiple line segments that are formed in the 2D to #D translation process is desirable,

SPLINE or ELLIPSE/CIRCLE fitting algorithms are desirable but can be added later.)



This icon will offer a limited selection of LINETYPES that are acceptable to the USPTO, layers for each have been created, selection of one sets the appropriate layer current.



This icon opens a VB window that assists the operator in picking the proper pen width or line weight. This option sets the layer that represents that line weight, after selecting a line weight all new work will be on that layer and therefore inherit that line weight. A tooltip note should point out to the operator that the copy properties "brush" can be used to correct improperly weighted lines.

The selection should be limited to those line weights approved by the USPTO. Use the publication for

reference to these line weight specifications.



This icon should open the AutoCAD Design Center and give access to a file filled with USPTO approved set of symbols (in block format) that the user can choose from.



Selecting this icon will allow the user to choose items that will be shown for clarification but are not included in the patent being applied for.

These items will be treated in a special manner, they will be changed to a hidden layer where the LINETYPE of all elements will be changed to HIDDEN. Those objects which are behind the claimed portion, will be hidden in a normal manner. Those items that are to be presented over-top-of the claimed item will be "hidden" themselves but superimposed over the claimed item(s) and not hide those items behind them. This may have to be created in several separate operations and superimposed in layers.



This icon is for use to create perspective (foreshortened "camera") views from oblique views.



Help specific to Utility Patents

P105 Understanding and preparing Utility Patent text documents for the patent attorney.

Nlkn

P106 US Trademark preparation and submission to the USPTO

Trademark



This icon offers the user the opportunity to bring raster images of items such as logos that have been scanned into the background of AutoCAD in preparation for tracing. A VB window may open offering aid in sizing or cropping the scan before insertion.



This icon opens a trace feature that aids the user in creating closed PolyLINES around the color areas that must be hatched to represent different colors to be defined. This is a raster to vector translator.



This icon opens the BHATCH window that offers the user the opportunity to flood fill areas that have been vectorized (closed PLINE areas) with USPTO specified (a limited selection of 8 optional hatches/swaps, color for corresponding hatch). The user picks a hatch (by color name), the window closes, the user selects within an area, the window opens, the option to review is offered or to accept. This process is continued until the user selects CLOSE.



Icon opens the users browser and connects to the TESS web search engine.



This icon opens the PLOT command window. On screen review is available, graphics and text pages, a plotter definition can also be chosen to compile the graphics and the appropriate forms and electronically submits them to the Library of Congress.



This icon accesses a library of trademark template forms that will open in MSWord.



Trademark specific help.

P107 Copyright preparation and submission to the Library of Congress

Copyright



This icon offers the user the opportunity to bring raster images of items such as logos that have been scanned into the background of AutoCAD in preparation for tracing. A VB window may open offering aid in sizing or cropping the scan before insertion.



This icon opens the PLOT command window. On screen review is available, graphics and text pages, a plotter definition can also be chosen to compile the graphics and the appropriate forms and electronically submits them to the Library of Congress.



This icon accesses a library of Copyright template forms that will open in MSWord.



Copyright specific help.

P108 Electronic Filing System submission specifics US

EFS-US Patent and Trademark office submission:

Overview:

Each country has a different requirement for handling the output from IP-Docs.

US:

The USPTO uses a software package that they have developed called ePAVE. EPAVE is authoring software. You don't do any actual preparation of documents with this package. You use it to collect the graphics and text documents together, compress and encrypt them and send them to the USPTO. That process provides receipt confirmation (that your patent has been received and accepted) as the final filing step.

Assignment:

- 1) Print and review the study outline below.
- 2) Read the 157 page government publication "Electronic Filing System, Submission Manual ePAVE" found at www.uspto.gov/efsepave.pdf .
- 3) Obtain a digital Certificate, read and understand it thoroughly.
- 4) Download and familiarize yourself with the ePAVE software.
- 5) Take the USTO EFS ePAVE test to complete and be credited with Level 8 US IP-Docs certification.

It is suggested that you print the following study outline in advance of your reading and use it to make notes as you read the document(s) as a future resource for collected information & as preparation for the test at the end of the lesson.

Study outline:

Identify the following acronyms and be aware of their function with regard to ePAVE:

EFS
TIFF
Kbps
CRF
ASCII
PAIR
PatentIn
EBC
PAC
10 MB limit
VML

Make a list of all the e-mail addresses, phone numbers, and web sites listed in the document and note what information you will need to get from each during the patent process.

Identify the following ePAVE related terms and know how they relate to the Electronic File Submission process:

Group 4 compression
Assignee undivided
Practitioner
Sequence listing
Legal Framework Document
Provisional Patent Application
Plant new utility
Assignment Recordation

Pre-Grant Publication
Redacted copy
Tagged structured documents
Patent ownership
Submission Transmittal
Lucida Sans Unicode
Small entity statement
Digital certificate file

Note the order of operations of use for the following items:

Pre-Grant Publication
Downloading the ePAVE software
Obtaining a Digital Certificate
Obtaining Digital Security Software
Making an electronic connection with the USPTO

Test for level P108 competency, USPTO EFS ePAVE

1) Where is the FAQ (frequently asked questions pages) for the USPTO EFS?

- a) www.uspto.gov
- b) ebc@USPTO.gov
- c) www.efscenter.gov

2) How do you access the ePAVE software?

- a) Is the ePAVE software available on CD?
- b) Is the ePAVE software available on floppy disks?
- c) Is the ePAVE software available for download?
- d) Does the software run as a Java applet off the ePAVE site for security reasons?

3)

P109 The inspection and resubmission process (including the use of Compact Disks)

Biui

P110 Preparation of international patents by country

Mlk

P111 Managing your patent portfolio with IP-Docs

K

P112 IP-Docs customization and programming guidelines

Klj