

# PDHonline Course G201 (2 PDH)

# Protecting Designs Under Patent, Copyright and Trademark Law

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### **Appendix**

Pertinent portions of Manual of Patent Examining Procedure

Chapter 13 of the Copyright Law on Designs

Federal Statutory Protection for Mask Works

United States patent D 521,201 (issued May 16, 2006)

Untied States patent D 521,106 (issued May 16, 2006)

## What is product design?

In everyday language, a product design generally refers to a product's overall form and function. An international term often used for product design is "industrial design." Businesses devote significant resources to developing a product's functional and aesthetic features taking into consideration transportability, marketability, manufacturing costs, storage, durability, repair and disposal.

From an intellectual property law perspective, however, a product design refers only to the nonfunctional ornamental or aesthetic aspects of a product and is distinct from any technical or functional aspects. In other words, it refers only to the appearance of a product.

#### Product design consists of:

- Three-dimensional features, such as the shape of a product or esthetic configuration of its components,
- Two-dimensional features, such as surface ornamentation, patterns, lines or color of a product; or
- A combination of one or more such features.

## Why is Product Design Important?

Businesses often devote a significant amount of time and resources to enhancing the design appeal of their products. The goal is to increase their market share and profit margin. The World Intellectual Property Organization suggests that new and original designs are often created to:

- Customize products to appeal to specific market segments: small
  modifications to the design of some products (e.g. a lamp or a watch) may
  make them suitable for different age groups. While the main function of a
  watch or a lamp remains the same, children and adults generally have
  very different tastes in design. Other market segment differentiation
  approaches may attempt to appeal to different cultures, social groups,
  hobbies or professions.
- Create a new niche market: In a competitive marketplace, many companies seek to create a niche market by introducing creative designs for their new products to differentiate them from those of their competitors. They may appeal to sportsman, athletes, affluent groups, students or other niche market segments.
- 3. **Strengthen brands:** creative designs are often also combined with distinctiveness of a company's brand(s). Many companies have

successfully created or redefined their brand image through a strong focus on product design.

# Why protect product designs?

WIPO's pamphlet for small to medium sized enterprises offers the following insights:

"A product design adds value to a product. It makes a product attractive and appealing to customers, and may even be its unique selling point. So protecting valuable designs should be a crucial part of the business strategy of a designer or manufacturer.

"By protecting a product design the owner obtains the exclusive right to prevent its unauthorized copying or imitation by others. This makes business sense as it improves the competitiveness of a business and often brings in additional revenue in one or more of the following ways:

- By registering a design you are able to prevent it from being copied and imitated by competitors, and thereby strengthen your competitive position.
- Registering a valuable design contributes to obtaining a fair return on investment made in creating and marketing the relevant product, and thereby improves your profits.
- Product designs are business assets that can increase the commercial value of a company and is products. The more successful a design, the higher is its value to the company.
- A protected design may also be licensed (or sold) to others for a fee. By licensing it, you
  may be able to enter markets that you are otherwise unable to serve.
- Registration of product designs encourages fair competition and honest trade practices, which, in turn, promote the production of a diverse range of aesthetically attractive products.

"Decisions on how, when and where to protect a company's product designs may have an important impact on other areas of design management. It is crucial therefore to integrate issues of design protection into the broader business strategy of an enterprise. For example, the type of protection, the costs, the effectiveness of protection and issues of ownership of designs, may be important considerations when deciding:

- Whether to undertake design development in house or to commission an outside agency;
- The timing of the initial use of a new design in advertising, marketing or public display in an exhibition;
- Which export markets to target;
- If, when and how to license or assign a design to be commercially exploited by other companies in return for economic remuneration."

Source: <a href="http://www.wipo.int/sme/">http://www.wipo.int/sme/</a>

## **Design protection under Trademark law**

Product design falls within the scope of trade dress protection and may be protected as a registered or an unregistered mark under Section 43(a) of the Lanham Act. Some courts have been conservative in extending protection so as not to undermine protections afforded by copyright and patent laws.

Think about Toblerone's pyramidal shaped chocolate bars. Even without the box, consumers recognize the shape of the candy and associate that with a particular source, Toblerone.

Designs (and those incorporated into product trade dress) that have been granted protection include:

- Playtex's ice cream cone packaging for feminine hygiene products,
- No. 12 OUZO bottle and box (Greek aperitif),
- Corning Fiberglass's use of the distinctive pink colored fiberglass,
- Fantastic's Spray bottle,
- the overall restaurant design for Two Pesos Restaurant,
- a drain opener container by Days-Ease Home Products Corp., and
- the Klondike Bar package.

To qualify for protection under trademark law, the features of the product design for which coverage is sought must be:

- 1. Nonfunctional;
- 2. distinctive (as acquired through establishment of "secondary meaning" or "consumer recognition"); and
- Use of the design by others is likely to cause confusion.

How do we know if the design is considered functional? The Supreme Court has defined functional as:

In general terms a product feature is functional if it is essential to the use or purpose of the article or if it affects the cost or quality of the article.

Inwood Lab., Inc. v. Ives Lab., Inc., 456 U.S. 844, 850 n.10 (1982).

Thus, the courts will focus on the design as a whole and look at the availability of alternative designs. Inquiries that will be made will include:

- Are the features merely useful or essential to the use or purpose of the article?
- What are the combination of elements and the total impression that the product design gives the observer?
- Is the product design's shape or feature of construction an arbitrary concept?

Factors that will be considered to make the determination of nonfunctional include:

- 1. Existence of a utility patent that discloses the utilitarian advantage of the design;
- 2. Advertising by the design owner touting the design's utilitarian features;
- 3. Lack of alternative designs; and
- 4. Comparative simplicity or cost saving resulting from the method of manufacture of the articles.

Prior to 2000, the federal courts were in disagreement about the tests and standards to be applied, creating an inconsistent body of federal law on the distinctiveness element for product designs. In 2000, the Supreme Court resolved the inconsistency, finding that product design cannot be inherently distinctive. It is now clear that distinctiveness is established by a showing that the mark has acquired consumer recognition and allows customers to identify the source of the article merely from observation of the design. In other words, distinctiveness is shown through long use, advertising expenditures, sales success, consumer surveys, copycat attempts, and other factors traditionally associated with consumer recognition (secondary meaning).

# State unfair competition law may also protect product design

In New York, state unfair competition law may protect trade dress even in the absence of secondary meaning.

A business devotes it resources to creating an identity for itself and its products, and establishing good will in the marketplace. Competition

is based on the premise that customers can distinguish between the various products in the marketplace. Competition is hampered when consumers mistake one product for another.

While a free marketplace encourages competition in the free enterprise system, there can be negative consequences to practices that hamper fair competition. Aggressive and shrewd marketing practices are not the subject of unfair competition laws. Rather, unfair competition focuses on deceptive, fraudulent and dishonest practices from which a business profits from the reputation of its rival.

Unfair competition law protects business against would-be competitors from confusing customers by using identifying trade devices, in this case, product designs, that make it difficult for customers to distinguish one product from another in the marketplace. For competitors in the same geographic region or field of business, the protection afforded is greater than for businesses in different regions or

businesses where the likelihood of confusion is greatly diminished.

Unfair competition law serves five purposes:

- 1. It protects the economic, creative and intellectual investments made by businesses,
- 2. It preserves the good will that a business has established over time,
- 3. It deters businesses from appropriating the good will of competitors,
- 4. It promotes clarity for customers who rely on a merchant's reputation when evaluating the price and quality of competitive products, and
- 5. It increases competition by providing incentives to offer better products.

In New York, a confidential business relationship or a valid agreement to refrain from acts of unfair competition may be required to succeed in litigation. Additionally, New York courts have found that a federal copyright claim may preempt a state claim based on deceptive or unfair trade practices.

# Protections of Vessel Hull Designs under Copyright Law

Copyright law protects vessel hull designs where the designer of a useful article, a vessel hull, makes the article attractive or gives it a distinctive appearance to

the purchasing or using public. An original design is defined as the result of the designer's creative endeavor that provides a distinguishable variation over prior work pertaining to similar articles which is more than merely trivial and has not been copied from another source. Protection may also be available for substantial revisions, adaptations and rearrangements that essentially amount to new original designs.

The following is an extract from a report on the Vessel Hull Protection Act at <a href="https://www.copyright.gov">www.copyright.gov</a>:

"The Vessel Hull Protection Act (VHDPA), part of the Digital Millennium Copyright Act (DMCA), added chapter 13 to title 17 of the United States Code; the title of the U.S. Code that contains copyright and related laws. The provisions contained in chapter 13, entitled "Protection of Original Designs," do not, however, provide copyright protection. Rather, they establish sui generics protection for original designs of vessel hulls. The Register of Copyrights is responsible for eligible vessel hulls. Since the passage of the VHDPA, the Copyright Office has registered over 100 vessel hull designs.

"The statute defines a "vessel" as a craft that is designed and capable of independently steering a course on or through water through its own means of propulsion, and that is designed and capable of carrying and transporting one or more passengers.

"A" hull" is the frame or body of a vessel, including its deck, but exclusive of the masts, sails, yards, and rigging. In addition to the hull, design protection under chapter 13 extends to the plugs and molds used to manufacture the hull. A "plug" is "a device or model used to make a mold for the purpose of exact duplication, regardless of whether the device or model has an intrinsic utilitarian function that is not only to portray the appearance of the product or convey information."

"A "mold" means "a matrix or form in which a substance for material is used, regardless of whether the matrix or form has an intrinsic utilitarian function that is not only to portray the appearance of the product or to convey information."

"Design protection for vessel hulls is for a period of ten years and is available only for original designs that are embodied in an actual vessel hull: no protection is available for designs that exist only in models, drawings, or representations.

"Once an application for registration is received by the Copyright Office, it is evaluated for completeness and sufficiency under the provisions set forth in chapter 13. If the Office refuses to register a design, the applicant may seek reconsideration by filing a written request within three months of the refusal. Should such refusal be upheld, the applicant may seek judicial review of the final refusal. For those applications deemed sufficient, a registration certificate is issued which includes a reproduction of the drawings or other pictorial representations of the design. Notification that a registration is the date on which publication of it is made. The Copyright Office publishes registrations by posting them on the Copyright Office web site.

"Any person who believes that he or she will be damaged by a registration made by the Office under chapter 13 "may upon payment of the prescribed fee, apply to the Administrator at any time to cancel the registration on the ground that the design is not subject to protection under this chapter, stating the reasons for the request." The statute authorizes the Register to establish regulations setting forth the procedures to be followed in a cancellation proceeding.

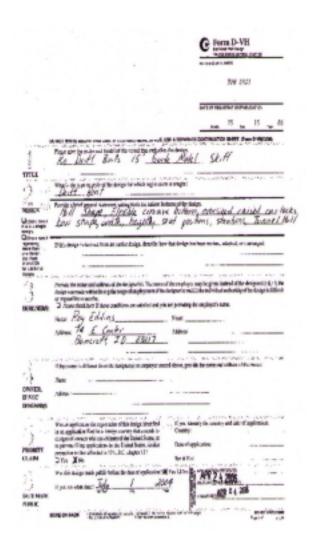
"Protected designs that are made public must bear a proper design notice. Unlike notice of copyright, which is permissive, notice on a vessel hull design is mandatory. The design notice must state that the design is protected and contain the year in which the protection first commenced along "with the name of the owner [of the design], an abbreviation by which the name can be recognized, or a generally accepted alternative designation of the owner." A distinctive identification of the owner may be substituted for the actual name, provided that the distinctive identification has been previously recorded with the Copyright Office. Once a design has been registered, use of the registration number in place of the date of protection and name of the owner on the design notice is sufficient. A design notice must be affixed to a location on the vessel so as to give "reasonable notice" that the vessel contains a protected design.

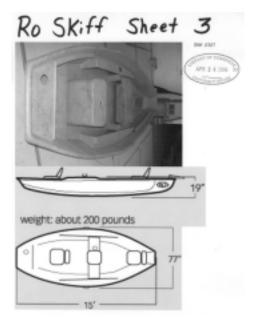
"The owner of a design is entitled to institute an action for infringement of his or her design provided that he or she has first obtained a registration certificate from the Copyright Office. An infringement suit may be brought in Federal court or all of any pert of a dispute may be settled by arbitration if the parties to an infringement dispute agree. Remedies available for design infringement include damages, the infringer's profits, attorney's fees, injunctive relief and seizure and forfeiture of the infringing goods. Chapter 13 also sets forth penalties for anyone who brings an infringement action knowing that the registration of the design was obtained through false or fraudulent representation, who knowingly makes a false representation in order to obtain a registration, or who knowingly applies a design notice to an unprotected vessel hull design."

Examples of May 15, 2006 vessel hull registrations include:

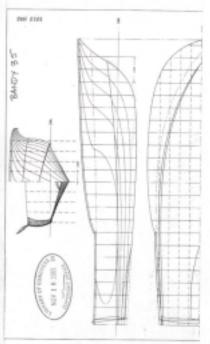
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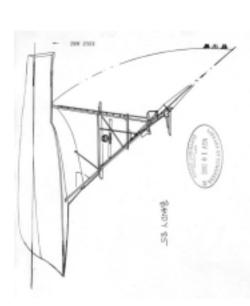














Protection will not be afforded to staple or commonplace designs such as standard geometric figures or shapes and patterns and configurations which have become standard, common, prevalent or ordinary. Modifications in insignificant details or in elements which are variants commonly used in the relevant trades will not be enough to overcome this basis for rejection. Protection will also not be extended to familiar symbols, emblems, or motifs.

Most importantly, protection will not be granted for designs dictated solely by utilitarian function of the article that embodies it or that was embodied is a useful article that was made public more than 2 years prior to registration. If an application has been previously filed in a foreign country, the applicant may consider the date of the foreign filing as their filing date so long as the US application is filed within 6 months of the foreign application. A design is made public when it is publicly exhibited, publicly distributed, or offered for sale or sold to the pubic by the owner or with his consent.

Protection begins on the earlier of publication of the registration or the date the design was first made public. The term of protection is 10 years and ends on December 31 of the expiring year. When the term ends, protection is no longer granted for the design, no matter how many articles the design is embodied within and when they were introduced.

Design protection vests the owner with the right to make, have made, import, for sale or use in any trade, as well as the right to sell or distribute for sale or use, any article embodying the design. Infringement will not include pictures or illustration of the design, just articles embodying the design.

Design copyrights may be transferred in the same way as other property – by gift, sale, assignment, mortgage, will, intestacy, and the like. However, the transfer documents should be filed with the US Copyright Office (preferably within 3 months) or they may not be effective against subsequent bona fide purchasers for valuable consideration.

One important thing about design copyrights is that their copyright law protection terminates upon the grant of a US patent in the same design, should one be filed.

# Interplay of Design Patent with Copyright and Trademark

Unfortunately, the inventor must generally elect between copyright and design patent protection. There are different terms of protection, different penalties for infringement, and different procedures for procuring protection. There are some circumstances where both may be claimed. The MPEP Section 1512 provides that:

#### I. DESIGN PATENT/COPYRIGHT OVER-LAP

There is an area of overlap between copyright and design patent statutes where the author/inventor can secure both a copyright and a design patent. Thus an ornamental design may be copyrighted as a work of art and may also be subject matter of a design patent. The author/inventor may not be required to elect between securing a copyright or a design patent. See In re Yardley, 493 F.2d 1389, 181 USPQ 331. In Mazer v. Stein, 347 U.S. 201, 100 USPQ 325 (1954), the Supreme Court noted the election of protection doctrine but did not express any view on it since a design patent had been secured in the case and the issue was not before the Court.

#### II. INCLUSION OF COPYRIGHT NOTICE

It is the policy of the U.S. Patent and Trademark Office to permit the inclusion of a copyright notice in a design patent application, and thereby any patent issuing therefore, under the following conditions.

- (A) A copyright notice must be placed adjacent to the copyright material and, therefore, may appear at any appropriate portion of the patent application disclosure including the drawing. However, if appearing on the drawing, the notice must be limited in print size from 1/8 inch to ¼ inch and must be placed within the "sight" of the drawing immediately below the figure representing the copyright material. If placed on a drawing in conformance with these provisions, the notice will not be objected to as extraneous matter under 37 CFR 1.84.
- (B) The content of the copyright notice must be limited to only those elements required by law. For example, "©1983 John Doe" would be legally sufficient under 17 U.S.C. 401 and properly limited.
- (C) Inclusion of a copyright notice will be permitted only if the following waiver is included at the beginning (preferably as the first paragraph) of the specification to be printed for the patent:

A portion of the disclosure of this patent document contains material to which a claim for copyright is made. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure, as it appears in the Patent and Trademark Office patent file or records, but reserves all other copyright rights whatsoever.

However, a design patent may complement trademark protection. It is not uncommon to file for both trademark and design patent protection. The MPEP provides as follows:

#### III. DESIGN PATENT/TRADEMARK OVERLAP

A design patent and a trademark may be obtained on the same subject matter. The CCPA, in In re Mogen David Wine Corp., 328 F.2d 925, 140 USPQ 575 (CCPA 1964), later reaffirmed by the same court at 372 F.2d \*>539<, 152 USPQ 593 (CCPA 1967), held that the underlying purpose and essence of patent rights are separate and distinct from those pertaining to trademarks, and that no right accruing form one is dependent or conditioned by the right concomitant to the other.

When a trademark is used in the drawing disclosure of a design application, the specification must include a statement preceding the claim identifying the trademark material forming part of the claimed design and the name of the owner of the registered trademark.

Other available protection includes unfair competition and trade dress protection. These bodies of common law have similar concepts in the tests for infringement; however, they have different legal protection, damages and enforcement mechanisms.

## **Design Patents**

Design patents are directed at protecting surface ornamentation, configuration of parts, shape of the article or a combination of these elements. A design patent should only be chosen if the appearance of the invention is important, otherwise utility patent protection should be sought. Protection is granted for definite and reproducible designs with a pleasing aesthetic appearance that is not dictated by functional considerations.

Design patents are often chosen when utility patent protection is not likely to be granted on the basis of the prior art. This situation arises with common articles of manufacture where novelty and nonobviousness would be difficult, or impossible, to establish.

A design patent is infringed when an infringing design resembles the patented design as to deceive the ordinary observer who gives as much attention as a purchaser usually gives. (We would not expect the purchaser of a \$1.50 retail item to spend as much time and attention as the purchaser of a \$50,000 piece of industrial equipment.)

Not surprisingly examples of subject matter protected by design patent include things of beauty, such as architecture, fountains and even the Statue of Liberty.

Design patent protection is also available for the "elimination of unsightly repulsiveness that characterizes many machines and mechanical devices which have a tendency to depress rather than excite the esthetic sense." Protection has been granted, for example, to the shank portion of a drill and a concrete mixer.

Subject matter not eligible for design patent protection includes things not intended to be visible in actual use, offensive designs, and functional designs.

The case of "visible in actual use" has raised interesting issues. For example, think about prosthetic bone implants for a moment. When in use, they are enclosed within a human body – not visible to anyone. Could they ever be protected by a design patent? The courts have stated that test is whether in some point of the article's commercial life, design is a matter of concern. Would doctors be inclined to purchase one design over another? The court considered

other examples of products that were hidden while in actual use such as lingerie, garment hangers, tent pegs, and inner soles for shoes.

It is the functionality of the design, not the article of manufacture itself, that is important. The key inquiry will be: are there several ways to achieve the function of the article? (Could the parts be arranged some other way?)

In design patents, the drawings are the "meat" of the specification and are used to describe and claim the patented features. How we prepare design patent drawings will be covered later in this course.

The term of a design patent is 14 years from the date of issuance. This differs from the utility patent term of 20 years from date of filing.

Let's look at a few examples of design patents:

United States patent D277,363

Tone Brothers ornamental jar (bulk herbs and spices)



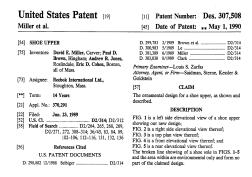


Design Patent Protection is available because there are other ways to achieve the function of storing spices.

United States patent D307,508

#### Sneaker

(This patent was involved in an infringement action between Reebok and Payless Shoes.)





A sneaker design may be protected since there are other ways to arrange the ornamentation on the surface of the athletic foot appeal.

# Free design patent searching

Free design patent searching may be conducted online at websites such as <a href="https://www.freepatentsonline.com">www.freepatentsonline.com</a> and

<u>www.USPTO.gov</u>. Additionally, many federal depository libraries, colleges and university libraries have patent research capabilities. The search engines use

standard Boolean searching methods. They also have user masks for free form searching for novice searchers.

## **Statutory Bars to Patent Protection**

Even if your invention falls within the statutory class of patentable subject matter, that is, it is novel and non-obvious, certain actions may forbid an inventor from receiving patent protection. These actions are referred to as "statutory bars." In the United States, a statutory bar will preclude a valid patent from being issued if the inventor failed to file for patent protection within one year of public disclosure of the invention. In foreign countries which have "first to file" rules, public disclosure set a statutory bar at the moment of public disclosure (i.e. no one year grace period is granted).

Most countries are "first to file," requiring that an inventor file for a patent prior to any public disclosure. However, there is also a "first to invent" filing system as we enjoy in the United States. While the benefits and limitations of each system are the subject of much legal commentary and current domestic controversy in the reform of the patent laws here in the United States, the most practical implications of our first to invent statutory scheme will be explained.

In the United States, an inventor can reveal information to the public and still seek patent protection provided that the patent application is filed within one year of the first public disclosure. This one year statutory bar includes a sale or offer for sale of the invention as well as use of the invention in commerce. You must tell the public about your invention or leave it in a position where the public is placed on notice that you have invented the novel ornamental design. Exactly what constitutes "public" is a source of debate.

The sale need not be consummated - just a bona fide offer will suffice for the statutory bar to apply.

Should an inventor fail to file for a patent within one year, the invention falls into the public domain and anyone can practice the invention (e.g. use or manufacture the design) subject, of course, to any dominating design patents. The inventor may then only seek patent protection on non-obvious and novel improvements (or changes) in the design.

The Patent Office also requires that an inventor "act with diligence" to develop the invention from the point of conception to either an actual reduction to practice (building a prototype), or a constructive reduction to practice (such as preparing and filing a patent application). If an inventor does not act diligently to reduce an invention (design) to practice after conceiving it, the invention will be considered to have been abandoned.

## The Patent Prosecution Process – What to Expect

Once a patent application is filed, the patent owner/licensee should mark any products "patent pending". When a patent issues, the mark will be "US Patent X,XXX,XXX."

Within a month or so of filing a patent application, the Patent Office will send a Filing. This Filing Receipt will advise you of the following pieces of information:

- (1) The serial number the Patent Office Assigned
- (2) Confirmation of the Filing Date
- (3) Confirmation of the Inventors' names, application title, etc.
- (4) A Foreign Filing License (required before you can file in foreign countries)

Additionally, any defects in the application will be identified in this package. Such notices of defects include a Notice to File Missing Parts, Notice to File Corrected Papers, and the like.

An Assignment is typically filed within 2-3 months after the application is filed and an application number has been accorded. However, they can also be done at any time during the prosecution or after patent issuance.

#### Information Disclosure Statements and the Duty to Disclose

The Patent Office imposes a "Duty to Disclose" on those individuals involved with the prosecution of a patent application, including the applicant.

Title 37, Section 1.56 of the Code of Federal Regulations states:

"Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section."

One method of complying with the Duty to Disclose is to file an "Information Disclosure Statement", also known as an IDS. This submission is simply a list of the documents you would like the Patent Office to consider when examining your application. An IDS can be submitted at various stages throughout patent prosecution, but it can be done with no additional Patent Office Fee if filed within three months of the filing date.

While an IDS is useful for complying with the Duty to Disclose, it has another powerful use as well. An IDS is like a vaccination for your patent. Should the patent ever be litigated, it will have a higher degree of immunity to those references, as the examiner has already considered these references and determined that the patent was still allowable. There are two ways to get a reference on the "vaccinated" list:

- (1) The Examiner at the Patent Office finds a reference, considers it during examination, and places it on the list.
- (2) The applicant can file an IDS and force the Examiner at the Patent Office to consider the reference and place it on the list.

As such, the IDS strengthens a patent that might result from the application. Additionally, the IDS makes the examination of the application easier for the Examiner, as it gives the Examiner a head start on the examination process.

### Foreign Patent Protection

Any patent rights you ultimately obtain from a utility patent are only enforceable within the territorial limits of the United States federal government granting the limited monopoly and the jurisdictional limits of its courts. You will need to seek foreign patent protection in each country where you wish to enforce your patent. (This may include countries where you plan to manufacture, sell or export your products). If you do not file a PCT application or foreign patent application within six months of filing the U.S. design patent application, it may be difficult or impossible to obtain foreign patent protection.

#### Life within the Patent Office

#### Preliminary Examination

When the Patent Examiner receives an application, it is first examined to ensure it meets the basic requirement of "one application....one invention." If the Examiner believes that a given application contains more than one invention, a "Restriction Requirement" may be issued. If only one invention is being claimed, then the Examiner will begin an Examination on the Merits.

#### Restriction Requirement

During the Preliminary Examination, the Examiner may determine that the application contains more than one invention. In this event, the Examiner will issue a "Restriction Requirement" which will require the applicant to "elect" one of the inventions before proceeding to "Examination on the Merits." The non-elected invention is deemed "withdrawn", but may be recaptured in a Divisional Application.

#### Examination on the Merits

Once the Preliminary Examination is complete, the Examiner begins the Examination on the Merits (about 14-18 months after filing). The Examiner will evaluate any claims that have not been withdrawn due to a Restriction Requirement or canceled in an Amendment.

If the Examiner has no objections to the claims, then a "Notice of Allowance" will be issued, and the application moves to issuance of the patent.

However, it is extremely common for an Examiner to issue an Office Action that rejects some aspect of the application. The applicant may respond to the Office Action, either with arguments or by Amendments, to address the Examiner's rejections. In design applications, the Examiner often requires modifications to the drawings.

#### The Office Action

During the Examination on the Merits, the Examiner may reject the claim by issuing an Office Action. For Design applications, Examiners most frequently take issue with certain aspects of the drawings or the precise wording of the specification.

Office Actions come in three varieties: Final Actions, Non-Final Actions, and Restriction Requirements.

The applicant may respond to a Non-Final Office Action, either with arguments or by Amending the claim, specification, or drawings to address the Examiner's rejections. If a response is not timely filed, then the application is Abandoned for Failure to Respond.

If the Examiner is not persuaded by the Response or Amendment, then a Final Office Action may be issued. The response to a Final Office Action is usually an Appeal or acquiescing to the Examiner's position. Although the Examiner may allow the applicant to enter an Amendment after a Final Office Action, the applicant is not entitled to do so.

#### Amendment

In response to a Non-Final Office Action, the applicant may amend the claims and specification to address the issues raised by the Examiner. A patent attorney or agent can help construct arguments to counter the Examiner's rejection.

Amendments must be entered in a timely fashion. If an amendment is entered within three months of the mailing date of the Office Action, then the Patent Office will not charge any additional fees. Entering an amendment after the three month period requires the applicant to purchase an "Extension of Time" from the Patent Office. The Patent Office sells these time blocks in one month lots. So if you need only one additional day, you must purchase an entire one month of extension time! Each month is more expensive than the previous month, so the cost can rapidly mount. For example, a response in the fourth month (i.e. a one month extension) costs \$60 for a Small Entity. A response in the sixth month will cost the same Small Entity \$510!

The Patent Office won't wait forever. In response to most Office Actions, a response must be entered within six months of the mailing date of the Office Action (i.e. a maximum of 3 months of extensions may be purchased). Failure to respond by the deadline will result in abandonment of the application.

#### **Notice of Allowance**

The Notice of Allowance is the Patent Office giving your application the green light. The major obstacles have been traversed, but there are a few checkpoints that should be reviewed before proceeding. It takes most Design applications approximately two to three years from their filing date to get to this point.

When the Notice of Allowance is received from the Patent Office, a statement of the Issue Fee and Publication Fee that are due is included. The Issue Fee and Publication Fee must be paid before the specified deadline (which is not extendable), or the application will become abandoned. Currently, Design patents do not have publication fees.

At this time, you should also examine the quality of the drawings that the Patent Office currently has on record. The Patent Office will accept drawings that are merely "sufficient." Applicants often want their patents to publish using professional quality formal drawings instead. If such drawings have not already been submitted, now is the time to submit them.

#### Issue and Publication Fees

The Patent Office requires the payment of an "Issue Fee" within three months of the mailing of a Notice of Allowance. Failure to pay the Issue Fee results in

abandonment of the application. The amount of the Issue Fee varies depending on the size of the applicant (Small Entity or Large Entity) and the type of application (Utility or Design).

Once the Issue Fee is paid, the application is assigned a Patent Number and it is scheduled to issue on its assigned issue date. Any continuation child applications must be filed prior to that issue date, otherwise they will lose their priority dating. In addition, if you wait to file a related application until after the issuance of your patent, your newly-issued patent can be used as a prior art reference against your new application! You may lose valuable rights by failing to file a related application before your patent issues. In an attempt to allow the applicant as many chances as possible to file a child application, many law firms delay the payment of the issue fee until just before the deadline.

#### Issue Date

You've paid the Issue Fee. At last your patent application is transformed into a patent! The Patent and Trademark Office always issues patents on a Tuesday. This date is permanently recorded on the upper right hand corner of the patent. You now have the right to enforce your claims against infringers and prevent them from making, using, or selling anything that reads on your claims. Congratulations!

## **Cost of Design Patents**

Design patents are a relatively affordable type of protection. Currently, a design patent application has a filing fee of \$215. As a national average, an application costs around \$1,000 - \$1,500 in legal fees. In many places, the legal costs are less. Professional drawings may cost between \$30 and \$100 per page, but may be prepared in-house if the guidelines in this course are carefully followed. Prosecution costs vary depending upon the issues raised by the Patent Examiner, but are likely to be in the range of \$500 - \$2,500. Another benefit is that there are no maintenance fees with design patents.

## **Foreign Patent Protection**

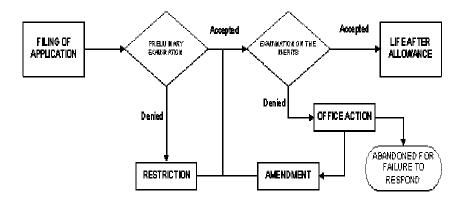
If foreign patent protection is sought, it must be done within 6 months of filing the U.S. patent application. Registration of an Industrial Design should also be considered.

# **Contrast with Utility Patent Applications**

For those familiar with utility patent applications, design patent applications differ in several important ways. First, there is no detailed description of the invention. Second, there is only a single claim. Third, priority claims and provisional applications are not allowed.

## **Overview of the Design Patent Process**

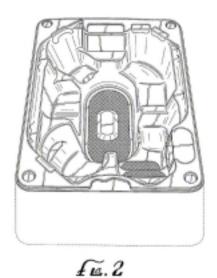
It takes 2-3 years for a design patent to be issued.



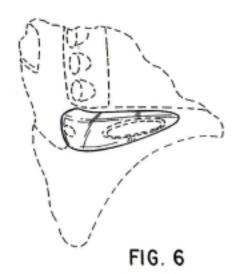
# **Examples of Subject Matter that Have Been Granted Design Protection**

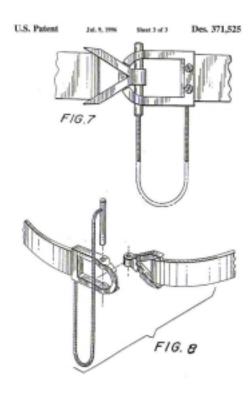






U.S. Patent May 16, 2006 Sheet 4 of 4 US D621,161 S



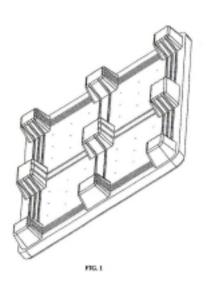






no. s

U.S. Patent May 16, 2006 Short L of 12 US D521,206 S













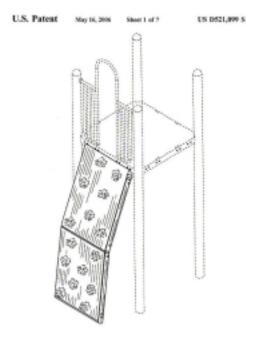
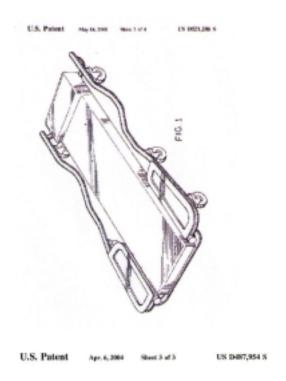
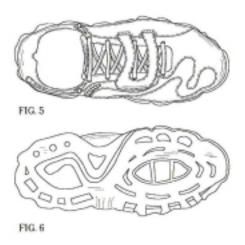


FIG. 1





## **Drawings for Design Patents**

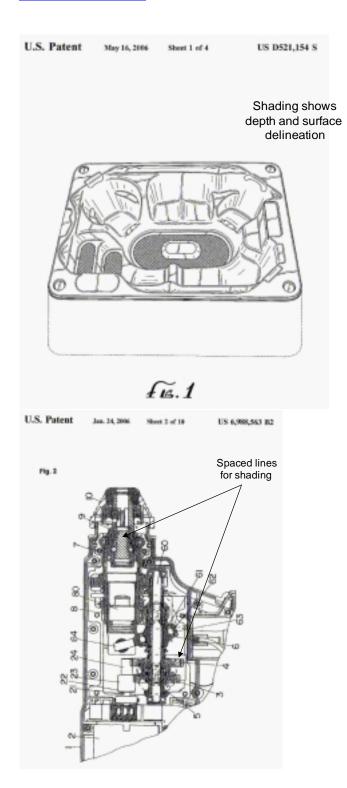
## Media

There are two acceptable manners for presenting drawings in utility and design patent applications: black ink or color. Black and white drawings are normally required. India ink, or its equivalent that secures solid black lines, must be used. The patent rules also recognize that "on rare occasions, color drawings may be necessary as the only practical medium by which to disclose the subject matter."

In those cases where color is required, the color drawings must be of sufficient quality that all details in the drawings are reproducible in black and white in the printed patent. In some circumstances, a petition must be filed with the Patent Office to seek the filing of color drawings and explaining why color is necessary. On a practical note, the patent websites only have black and white drawings in the patent images. Color drawings may not produce good images. Color versions are only available from the PTO for a fee and may be inconvenient for people viewing the patent. Of course, you will not be required to make such petition. That is the responsibility of the patent attorney/agent. However, you should use your expertise to find ways to avoid the use of color whenever possible. This will save time and expense in the patent application process.

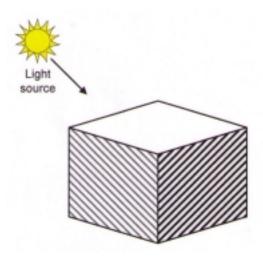
All drawings must be made by a process which will give them satisfactory reproduction characteristics. Every line, number, and letter must be durable, clean, black (except for color drawings), sufficiently dense and dark, and uniformly thick and well defined. The weight of all lines and letters must be heavy enough to permit adequate reproduction. This requirement applies to all lines (including fine lines), shading, and lines representing cut surfaces in sectional views. Lines and strokes of different thicknesses may be used in the same drawing where different thicknesses have a different meaning.

The use of shading in views is encouraged if it aids in understanding the invention and if it does not reduce legibility. Shading is used to indicate the surface or shape of spherical, cylindrical, and conical elements of an object. Flat parts may also be lightly shaded. Such shading is preferred in the case of parts shown in perspective, but not for cross sections. Shading will be addressed in greater detail later.



Spaced lines for shading are preferred. These lines must be thin, as few in number as practicable, and they must contrast with the rest of the drawings. As a substitute for shading, heavy lines on the shade side of objects can be used except where they superimpose on each other or obscure reference characters.

Light should come from the upper left corner at an angle of 45°.



Surface delineations should preferably be shown by proper shading. Solid black shading of areas is not permitted, except when used to represent bar graphs or color.

## Type of Paper

The patent drawing rules require that drawings submitted to the Office must be

"made on paper which is flexible, strong, white, smooth, non-shiny, and durable. All sheets must be reasonably free from cracks, creases, and folds. Only one side of the sheet may be used for the drawing. Each sheet must be reasonably free from erasures and must be free from alterations, overwritings, and interlineations."

In practical terms, this means that drawings are on unfolded, unwrinkled standard white copy paper (20 lb or 24 lb. varieties work well) or drawing paper. Graph paper is not preferred. Dot matrix style paper with holes along the edges may not be used.

Patent Agent Jack Lo and attorney David Pressman, in *How to Make Patent Drawings* 4<sup>th</sup> ed. (NOLO 2005), suggest that laser printing paper of 20 or 24 lb.

varieties are good choices. Laser printing is optimal, however, good quality ink jet output may be used. For ink jet output, they suggest not to use laser paper and cheap ink jet paper, explaining that they cause the ink to feather. They prescribe the use of specialty ink jet papers sold with descriptions such as "matte paper heavyweight," "archival matte," and "photoquality ink jet paper" (not glossy! Not shiny!).

It is important to note that erasure marks, white-out and corrections are not permitted. These informality defects are often the subject of drawing rejections. A trick of the trade, if you are doing hand-sketches, is to photocopy the final drawings to rid them of remnants of corrections.

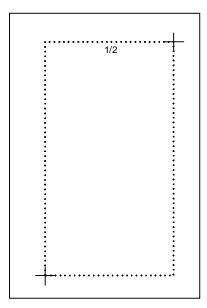
All drawing sheets in an application must be the same size. One of the shorter sides of the sheet is regarded as its top. The size of the sheets on which drawings are made must be: 21.0 cm. by 29.7 cm. (DIN size A4), or 21.6 cm. by 27.9 cm. (8 1/2 by 11 inches). Size A4 paper is required for PCT (Patent Cooperation Treaty or "international") applications and foreign applications.

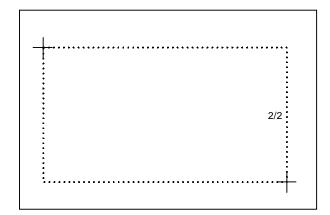
## Numbering of Sheets of Drawings

The sheets of drawings should be numbered in consecutive Arabic numerals, starting with 1. The numbering is in the following format: "sheet number/total number of sheets." Hence, numbering would be "1/4" for the first sheet of a series of 4 sheets for a patent.

These numbers, if present, must be placed in the middle of the top of the sheet, but not in the margin. The numbers can be placed on the right-hand side if the drawing extends too close to the middle of the top edge of the usable surface. The drawing sheet numbering must be clear and larger than the numbers used as reference characters to avoid confusion. A good rule of thumb might be 1/5 inch, 5 mm or 22 point font type.

If some drawings are in the portrait orientation and others in the landscape orientation, the sheet number for the landscape orientation should be on the right side and oriented as if the sheet were in the portrait orientation. All other numbering on the drawing should be oriented to be easily read in the landscape orientation.

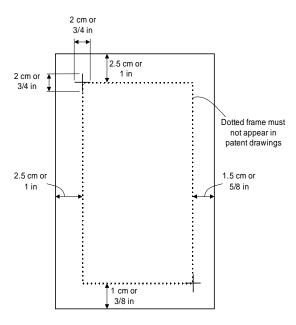




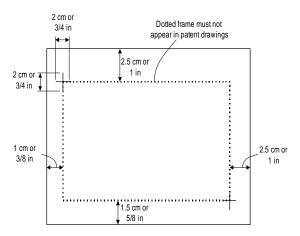
## <u>Margins</u>

Patent drawings must contain an imaginary margin surrounding the entire page. However, the sheets must not contain rectangular frames around the sight (i.e., the usable surface), but should have scan target points (i.e., cross-hairs) printed on two cater-corner margin corners. The center of the crosshairs should be positioned such that the arms of the crosshairs are in the margin itself. The arms of the crosshairs should be 2 cm or ¾ inch in length. You may place the cross hairs in the upper left and lower right corners, or alternatively, in the upper right and lower left corners.

Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch), thereby leaving a sight no greater than 17.0 cm. by 26.2 cm. on 21.0 cm. by 29.7 cm. (DIN size A4) drawing sheets, and a sight no greater than 17.6 cm. by 24.4 cm. (6 15/16 by 9 5/8 inches) on 21.6 cm. by 27.9 cm. (8 1/2 by 11 inches) drawing sheets.



#### **Portrait Orientation**

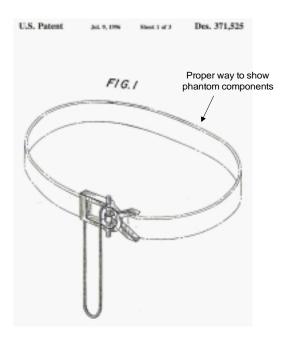


## **Landscape Orientation**

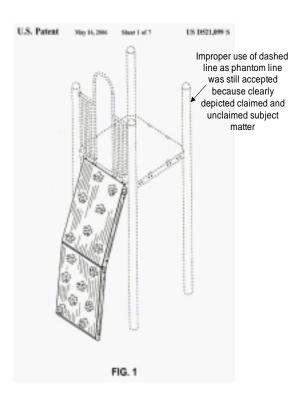
The drawings should be oriented in the portrait position whenever possible. Landscape orientation should only be used when absolutely necessary for long or wide drawings.

## Lines

Solid lines are used for edge lines and shading lines. Dashed lines may be used for hidden lines. Dash-dot-dot-dash lines may be used for phantom parts that do not comprise part of the invention. Dash-dot-dash lines may be used for projected lines to show how parts are assembled.



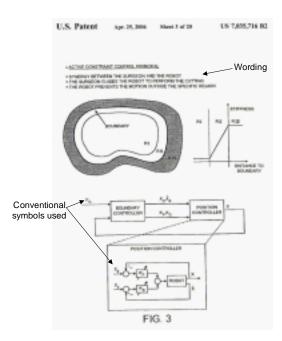
There are many examples of phantom components shown in dashed lines that have been allowed, however, it is best to follow the formal requirements and avoid a rejection. The following is an example of one that makes the visual image clear, despite using dashed lines.



Lines must be uniformly dense and free from jagged or feathered portions. They must be thick enough to allow for photocopying.

## **Arrangement of Views**

One view must not be placed upon another or within the outline of another. All views on the same sheet should stand in the same direction and, if possible, stand so that they can be read with the sheet held in an upright position. If views wider than the width of the sheet are necessary for the clearest illustration of the invention, the sheet may be turned on its side so that the top of the sheet, with the appropriate top margin to be used as the heading space, is on the right-hand side. Words must appear in a horizontal, left-to-right fashion when the page is either upright or turned so that the top becomes the right side, except for graphs utilizing standard scientific convention to denote the axis of abscissas (of X) and the axis of ordinates (of Y).



## **Scale**

The scale to which a drawing is made must be large enough to show the mechanism without crowding when the drawing is reduced in size to two-thirds in reproduction. Indications such as ``actual size" or ``scale \1/2\" on the drawings are not permitted since these lose their meaning with reproduction in a different format and size. Though not required, it is best to draw to scale in order to properly convey the invention. In cases where solid 3D computer models are readily available, three dimensional views may be captured easily by setting proper view angles.

## **Appendix**

Pertinent portions of Manual of Patent Examining Procedure

Chapter 13 of the Copyright Law on Designs

Federal Statutory Protection for Mask Works

United States patent D 521,201 (issued May 16, 2006)

Untied States patent D 521,106 (issued May 16, 2006)