Protecting the Industrial Arts

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Abstract:

Industrial design is a misunderstood and under protected art. In the United States, design patents are inadequate at protecting the true innovation that goes into good industrial design. Design is far more than the mere appearance or ornamentation of an object. This paper explains the importance of industrial design in the modern economy. This paper also advocates for new and enhanced industrial design protection by comparing United States Design Patents with other industrial design protection schemes from around the word.

Article:

Industrial design is a valuable art form that is currently being taken for granted by American patent laws. Design patents, in particular, are inadequate to protect industrial design. A quick search of law review articles on design patents yields titles that are uniformly critical. Numerous legal articles and commentaries contain heavy criticism for the design patent law for a variety of reasons, and articles praising the system are non-existent. More importantly, industrial designers do not like the patent system.

This is a real problem because industrial design is a critical success factor in modern manufacturing. The problem with industrial design is that it is an under appreciated art. Design – good or bad – is incorporated into everyday objects. Really
good design seems to be the exception, rather than the norm, and it adds genuine value. Perhaps the most obvious and famous example of the value of good design is the Apple, Inc. As of May 2011, Apple’s market cap has surpassed 300 billion dollars. Yet, virtually every product Apple makes has a functionally equivalent and less expensive competitor. Industrial design has made apple extremely profitable.

Despite all their flaws, design patents are more popular than ever. Both in the United States and around the world the number of patents is on the rise. 18,292 design patent application were filed in the United States in 2000. Ten years later, the USPTO received 29,059 applications. A vast majority of design patent applications go on to issue. In 2009 there were 25,806 design patent applications in the United States, and 23,116 grants. Meanwhile, 224,912 applications for utility patents with U.S. origins were filed in 2009, but only 82,382 were granted. Given the delay between filing and issue date, the applications and issues of the same year are not directly comparable for issue rate. Nonetheless, these numbers still provide a strong indication that most design patents eventually issue, while most utility patents are rejected. The rate of increase for design patent applications and issues is reason enough to re-consider protection for industrial design, let alone all the other legal problems that this paper will explore.

This paper is going to cover five areas: first, it is going to clearly define industrial art and distinguish it from fine art and useful art; second, its going to example problems with American design law with case studies to illustrate those problems; third, its going to look at international protection for industrial design; fourth, its going to examine the
history of sui generis design protection initiatives; fifth, this paper will conclude by advocating for a new, independent industrial art registration system.

**Part I: What is Industrial Art?**

Before entering into any legal analysis of design protection, a clear understanding of industrial design is required. Legal protection is difficult to justify without a clear definition of industrial design, distinguished from other forms of art, and its importance explained.

Until the 19th century “manufacturing” did not really exist, artisans who crafted objects individually made products. In the age of blacksmiths and gunsmiths, everything was custom made; consequently, if a repair were needed, the replacement part would require a custom fabrication to fit the particular object. In other words, the spare parts bin did not exist yet. Artisans made beautiful products, but this handicraft creation lacked the precision to reliably produce multiple identical parts.

Beginning in the late 18th century and the beginning of the 19th century, industrial production evolved away from skilled labor because of interchangeable parts. Many legends surround the origin of interchangeable parts, but it is clear that one of the primary places where interchangeable parts originated is France. A Frenchman named Blanc, though not the first to use interchangeable parts, was able to capture the attention of Thomas Jefferson who was in France. The idea came to the United States by way of Thomas Jefferson to Eli Whitney. To this day Whitney remains most famous for inventing the cotton gin. Unfortunately, Whitney was unable to secure patent
protection for the cotton gin under the patent laws of the time, and as a result his business was facing bankruptcy and Whitney was reportedly on the verge of nervous breakdown.\textsuperscript{vi} Though it is unclear when and where, the idea of interchangeable parts passed through Jefferson to Whitney when Jefferson returned to the United States.\textsuperscript{vii} Eli Whitney signed a famous contract with the United States government on June 14, 1798 to manufacture 10,000 muskets with interchangeable parts. Whitney ultimately delivered the muskets late, and historians still debate the success of the project. Nonetheless, Eli Whitney is the individual most associated with interchangeable part innovation in the United States.\textsuperscript{viii}

As with many innovations, many inventors besides Whitney were working on the same concept at around the same time. The Springfield Armory in Massachusetts was also pioneering steps in interchangeability around the time of Eli Whitney’s work. In September 1789 the Armory was able to produce 80 muskets. Eleven years later in September 1799, the Armory produced 442 muskets with the same number of employees. Unfortunately, some Armory records were destroyed in a fire so it is not clear what innovations were responsible for this remarkable increase in production efficiency.\textsuperscript{ix}

Not until the 1850’s did the term “American System of Manufacturing” become understood. The definition of the American System “included mass manufacture, by power-driven machinery, by machinery especially designed to serve its particular purpose, and by the use of the principle of interchangeable parts.”\textsuperscript{x} The American System of Manufacturing created a whole new class of worker. Skilled artisans were no
longer required; unskilled labor could be involved with the making of rather sophisticated products. Therefore, the skill in creating products transferred to designing products, and their methods of manufacture. Once the product and method of manufacture have been established, executing the manufacturing is a task for unskilled labor. The Industrial Design Society of American (“IDSA”) describes the work of industrial designer as creating, “the form of a manufactured product, considering both the needs of the people using the product, as well as the industrial process that will produce it.” Scott Klinker, Director of 3D design at Cranbrook Academy in Bloomfield Hills, Michigan, said the simplest definition of Industrial design is “inventions for mass production.” Therefore, industrial design is a whole new art form that survives until today.

Though mass production may carry negative connotations of consumerism today, the ability to reliably produce multiple identical parts was a huge accomplishment at the time and completely revolutionized the industrial world. Interchangeable parts meant cheaper and more reliable production. Throughout the nineteenth century the age of the artisan was reaching a sunset, and a new age of industrial art was beginning. Mass production really was not perfected until the development of the assembly lines in the early 20th century.

The most famous industrial designer of the 20th century is Dieter Rams. Rams worked for the Braun Company and he created 10 rules for good design that serve to indicate what industrial design really is all about:
1. Good Design is Innovative
2. Good Design Makes a Product Useful
3. Good Design is Aesthetic
4. Good Design Makes a Product Understandable
5. Good Design is Unobtrusive
6. Good Design is Honest
7. Good Design is Long Lasting
8. Good Design is Thorough, Down to the Last Detail
9. Good Design is Environmentally Friendly
10. Good Design is a Little as Possible

One major problem is that Dieter Rams’s definition of good design does not align with the USPTO’s definition of design: “a new, original and ornamental design for an article of manufacture…” Design patents only protect the ornamental aspect of a design. Case law has consistently held this to mean an object’s appearance, “sameness of effect upon the eye, is the main test of substantial identity of design.”

Industrial design is more than just appearance. Aesthetics are only one part of Dieter Rams’s definition. The first two points – innovative and useful – describe utility as opposed to mere appearance. Other tenets of Rams’s definition – understandable, long lasting, environmentally friendly – also speak to something more than mere appearance. Rams’s definition suggests that industrial art has a special relationship with the utility of a product. However, design patents strictly exclude anything that is functional, leaving that to utility patents.

An example of quasi-functional industrial design is the Fender Stratocaster guitar designed by Leo Fender. The Stratocaster, first produced in the 1950s, was a radical design; however, it was not radical just for the sake of being radical. Where the neck meets the body of the guitar, there are two cutaways. These allow a player to reach
the upper frets of the guitar. The body of the guitar is not a flat slab, but a sculpted shape; it has two main contours often called “belly cut” and the “elbow cut” that make it more comfortable to hold the guitar. The top “horn” is slightly longer than the bottom “horn” to compensate for the weight taken away by the contours – therefore the guitar is balanced when stood up vertically. There neck is bolted on to the body, as opposed to set-in with adhesive, so that the guitar is more easily repairable. The six tuning pegs are all on the same side of the headstock, as opposed to three on either side like traditional guitars; this design serves keep the strings straighter and help the stay in tune. The Stratocaster is one of the most popular and imitated guitars of all time because it just happens to look really cool as well. But is this just ornamentation, or is it function?

Figure 1: Fender Stratocaster

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Another example is the unibody Macbook laptop computer by Apple. It has an aluminum chassis and glass screen. This design seems very simple until it is compared with virtually every other laptop on the market. Most other laptop computer on the market has a body made of several panels with exposed screws holding the body together.\textsuperscript{xvii} The unibody Macbook is one single piece of metal with no gaps, seams, or exposed screws. It is a bold aesthetic statement as well as engineering accomplishment.

Apple’s Vice President of Design Jonathan Ive who leads the company’s Industrial Design Group (IDg) has described the design process as “a great struggle;” and he referred to his IDg’s attention to detail as “obsessive.”\textsuperscript{xviii} Apple uses this design because it is strong, environmentally friendly, and it has a minimalist aesthetic quality. The result is a more pleasing object and, as of 2010, Apple sales make up more than 90% market share for computers priced at more than $1000 dollars.\textsuperscript{xix}

Figure 2: Macbook Computer\textsuperscript{xx}
The next example is the Braun calculator by the venerable Dieter Rams. It is hard to believe that the Braun ET66 was produced in the 1980s. In the world of consumer electronics, 30 years is often a veritable eternity, but ET66 hardly looks antiquated. This design embraces many of Dieter’s principles: long-lasting, unobtrusive, and makes a product understandable. The shape, size, texture, color of the buttons are all designed for the human finger to touch. The space between the buttons and the arrangement of the buttons are design for clarity. The calculator is pleasing to look at, but it is also easier to use. No extraneous information printed around the buttons. Like the Macbook, the design is noteworthy for what is missing: gaps, seems, and exposed screws. A person does not have to hunt around the buttons to use it. The legacy ET66 can be seen in the most high-tech calculator of today – the Apple iPhone’s calculator application.

Figure 3: Braun Calculator

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Before the 20th century it was easier classify art as just ornamental. An engraving on a gun or a sword is just decoration in addition to the function of a product. However, in the 20th century a new style of art has been the dominant force in industrial art: Bauhaus or modern design. This style is well exemplified by the Apple Macbook and the Braun ET66. Among other things, modern design recognizes that the function of a product and the design of the product should work together. There is a necessary intertwining of aesthetics and function.

The lead designer for Apple, Jonathan Ive, said something interesting in the documentary Objectified, “good design almost feels un-designed.” Good design should seem almost inevitable. The user of an object should not be left asking why is it designed this way? Instead, why would it be designed any other way? This quality of “un-designed” should not be confused with lack of effort. Like a master musician who makes playing an instrument look almost effortless – all amateur musicians know that it takes a lot of effort to seem effortless.

The US system demands a separation between aesthetics and function. Design attorney Perry Saidman said design patents and utility patents protect totally different things, and it would be silly, if not unscrupulous, to use one to protect the other. Saidman has also written, “[A] design patent is said to be invalid if the design is primarily functional rather than primarily ornamental. Since a good industrial design ideally in separably blends form and function, the designer is penalized because her
Generally, government should encourage good things and discourage bad things. Innovations in usefulness are a good thing, so the government should encourage it.

Another definition of industrial design comes from IDSA. This organization has a membership of more than 3,300 industrial designers. The Amicus Curae brief submitted by the IDSA in the *Egyptian Goddess* case states, “Industrial designs create the form of a manufactured product, considering both the needs of the people using the product, as well as the industrial process that will produce it.” Therefore, utility factors into the IDSA’s own definition of Industrial design.

Instead, the law should recognize three main categories of art: fine art, useful art, and industrial art. Fine art is already recognized by the realm of copyright. Fine arts have a completely non-useful purpose. Fine art covers what is commonly thought of as art: made for primarily creative purposes and any market value is incidental. The price of a great painting is not based on the cost of the raw paint and brushes plus the artist’s hourly rate. The opposite of fine art is the useful arts – a phrase used in the Constitution – typically thought of as inventions. The useful arts are characterized by their functionality. The typical cost of the functional object is figured by raw materials and labor plus a certain profit margin.

If fine arts and useful arts occupy two ends of a spectrum, then there is space in the middle for what should be called industrial arts.
Industrial art is both aesthetic and functional. The object is designed to look good and to enhance usability. Like the useful arts the industrial art is capable of being mass-produced and sold. But like the fine arts, the design is just one of the infinite possibilities. The value of industrial art has both objective and subjective aspects too. It is well documented that companies who focus on design are more profitable than those who are not design-oriented.

Is it possible for law to protect design and utility? In order to have adequate industrial design protection, an understanding of the definition of industrial art is vital. Industrial art are those objects primarily created for market purposes – things to be mass-produced – with significant emphasis on a design that enhances the utility. The design in industrial art is something more than what is dictated by function.

Part II: Current Status of Industrial Design Protection in the US.

As early as 1840s designers were unhappy with the fact that knock-off artists could steal ideas with no legal consequences. Henry Ellsworth, the Commissioner of Patents, lobbied Congress to protect the appearance of useful articles of manufacture. This protection, Ellsworth argued even back then, would increase the output of quality design. The Design Patent law was passed in 1842. The scope of protection has never been amended. While the American System of Manufacturing was well underway by 1842, manufacturing and mass production hardly reached maturity until the 20th century with the advent of assembly lines. Therefore the American design patent law was a well-intentioned but ultimately untimely effort to protection industrial design.
Today in the United States, the industrial designer faces a tough dilemma. For example, what if the design is semi-functional? Should one pursue a design patent, utility patent, trademark, trade dress, or some combination of these?

Most of the main problems with design patents have been well documented. First, design patents take too long to get. Second, design patents only cover ornamental work. Third, there is too much overlap with copyright and trade dress. Fourth, US design patent laws do not play nice with international design protection.

In addition to the problems with design patents, two case studies illustrate successful industrial designs that did not seek design patents. The first example is the ClearRx prescription drug bottle, a famous industrial design now protected by utility patent. The second is the Brandir bike rack that did not qualify for patent or copyright or trade dress protection.

The IDSA named the ClearRx prescription bottle the design of the decade. The concept was originally developed Deborah Adler, as thesis for her design studio. She took the idea to Target Corporation, who eventually hired industrial designer Klaus Rosberg. Ms. Adler took up the challenge of redesigning the ubiquitous prescription pill bottle after her own grandmother accidentally took the wrong medicine. The problem with conventional pill bottles is that labels placed on a curved surface were difficult to read, especially for the elderly; furthermore, traditional labels are not always printed clearly. Ms. Adler’s concept combines a new bottle design with a new label design. The top half of the label consists only of “primary” information printed in large, clear
typeface: the name of the medicine and how to take it. The bottom half of the label features secondary information such as doctor and pharmacy information. The label curves over the top of the bottle and creates a sleeve on the backside of the bottle. A mini-pamphlet featuring even more medical information is stored there, in a convenient place where it is less likely to be lost. The bottle itself allows the name of the medical to be displayed on the very top so bottles can be stored in a drawer. The label is adhered to flat surfaces, making it easier to read. Also, colorful rings can be attached to the neck to more quickly distinguish bottles from each other. It is not surprising that Target’s pharmacy business has doubled since the introduction of the ClearRx bottle.  

The IDSA has called the ClearRx the finest example of design in the first decade of the 21st century. Yet this paragon of industrial design has been issued a utility patent. As a side note, a design patent protects the bottle shape itself, but a utility patent claims the combination of the label and the bottle – the blend of design and utility. The application was filed on September 27, 2007, and the notice of allowance was not sent until 2 years and 1 month later.
Designs that are minimal, or Bauhaus style, can have trouble finding a legal home. This problem is exemplified by Brandir bike case. The RIBBON bike rack had a unique but very elegant design. The rack itself was inspired by some sculptures in the designer’s home. Someone suggested those sculptures would make good bike racks. As a result, the rack uses standard size plumbing pipe (a favorite motif of modern design – taking common objects and making them into art). The design offers enough space to park not only bikes, but also mopeds and such to the rack. Secure in-ground installation only requires two holes. The rack first went on sale in 1979. The Brandir Company spent $38,500 between 1979 and 1982 to promote the rack. It was featured in prominent architecture publications. In 1980 the rack won an award from the IDSA. The design has been featured museum exhibits about industrial design. The RB 07 model was the most
popular and it sold for $485. By the mid-1980s, Brandir had made over 1 million dollars in sales.\textsuperscript{xxxv}

Naturally, others copied this design. Brandir sued an infringer and argued the design should be copyrightable because it qualified as minimalist art. Brandir’s expert stated, “The meaning is to be found in, within, around and outside the work of art, allowing the artistic experience to be experienced as well as intellectualized.”\textsuperscript{xxxvii} The court went on to say, “While the RIBBON Rack may be worthy of admiration for its aesthetic qualities alone, it remains nonetheless the product of industrial design. Form and function and inextricably intertwined in the rack, its ultimate design being as much the result of utilitarian pressures as aesthetic choices.”\textsuperscript{xxxviii} The Court of Appeals remanded the case to determine whether the rack qualified for trade dress protection. The District Court had initially rejected the trade dress claim because the rack was functional. The Court of Appeals made the distinction that trade dress can be functional, but it cannot be solely dictated by function. Since multiple bike rack designs

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exist, this design is not dictated by function. Ultimately, it could not get copyright protection because it had functionality and it could not get trade dress protection because it was not inherently distinctive or had secondary meaning.

The most recent event in the world of design patents was the case of *Egyptian Goddess, Inc. v. Swisa, Inc.* This case is encouraging for those who want strong protection for design in the United States. Prior to *Egyptian Goddess*, the courts were using a point of novelty to test to determine whether a design was an infringer. A point of novelty test made it rather easy to “design-around” because the protection of a design was really limited to certain features as opposed to the object as a whole. As many commentators have noted, *Egyptian Goddess* puts some teeth back into design patents.

The grandfather of design patent cases is *Gorham Co. v. White*, which enunciated a substantial similar test to the ordinary observer test for design infringement. Over the years, the case added a second test to this substantial similarity test, that was the “point-of-novelty.” This test basically limited design protection only to the certain areas that were different than prior art. The result of this test was that a designer could easily design around the various points of novelty and not infringe a protected design, regardless if the designs were still similar in a broad sense. The court *Egyptian Goddess* rejected this much-criticized point of novelty test. Many commentators hailed *Egyptian Goddess* as a sign that the courts were putting teeth back into design patents. However, *Egyptian Goddess* is also a reminder about the frustrations posed by design patents.
In conclusion, objects that clearly fall within the realm of industrial design, and have had tremendous commercial success, do not clearly fall into one area of legal protection, and this is a problem that should be remedied. These systems are particularly problematic for small to medium size enterprises. As it stands many industrial designers are forced to make a gamble: should one invest thousands of dollars and years of time only to perhaps walk away empty handed from the United States patent system?\textsuperscript{xlii} The current patent system only promotes the useful arts for those who can afford to navigate the system.

**Part III: Protection of Industrial Design in Europe and Australia**

In addition to purely domestic issues, another main problem is that the United States design patent law does not mesh well with international design protection agreements.

International design protection is important because manufacturing and marketing has gone global. With online commerce, even start-up business can take orders from overseas. Many bestselling books instruct individuals and small enterprises on how to take advantage of outsourcing.\textsuperscript{xliii} Since design is a critical component of making a product/business successful, it is important the United States have a system of protecting design that jives with international agreements. Perry Saidman has made the argument that “by recognizing the creativity of industrial designers, [sui generis industrial design legislation] would treat them as a national resource, as do other nations.”\textsuperscript{xliv}
The European Union has attempted to enact international industrial design with its Community Design scheme in 1998. One of the most unique features of this system is that it protects both registered and unregistered designs. Many European countries have joined European Community for Industrial Design Protection. This system has been in effect since 2001. The main advantage for the European Community is a design registration system as opposed to an examination system as is used in the United States. This registration system has two advantages. First, while American designers are waiting around for up to two years to find out whether their design will be protected, unregistered designs are protected for a few months in Europe. Furthermore, registered designs are protected until challenged. This system more resembles US copyright law than patent law.\textsuperscript{xlv}

In order to qualify for design protection in the European Community, design is defined as “the appearance of the whole or a part of the produce.”\textsuperscript{xlvii} A product is defined as any “industrial or handicraft item, packaging, get-up, graphic symbols or typographic typefaces.”\textsuperscript{xlvii} The Community Design Regulation (“CDR”) also covers appearance created by the lines, colors, contours, shapes, textures, and materials of a product. The CDR even permits designs that are quasi-functional, so long as a design is not “solely dictated by its technical function.”\textsuperscript{xlviii} Furthermore, an unregistered design that has new and individual character, in other words, one that could be registered, will be protected automatically by mere disclosure.\textsuperscript{xlix}

Furthermore, European Union countries are also members of the Hague Agreement for protection of Industrial design. More interestingly, countries such as
Japan, China, the United Kingdom and the United States are not members of Hague Agreement. This Agreement is like the Patent Cooperation Treaty for designs. Administered by the World Intellectual Property Organization, the Hague Agreement really consists of three separate acts. The first was the London Act passed in 1934. The second was the Hague Act of 1960. And most recently, the Geneva Act was passed in 1999. A country can sign up for either the Hague Act or the Geneva Act (the London Act is now closed).

In 2007, The United States Senate has actually considered a treaty for the United States to join Geneva Act. President George W. Bush recommended ratification of the treaty the Senate. As of this writing the United States has not joined the Geneva Act. The Senate Judiciary Committee, upon testimony from the USPTO, recommended that changes be made to the American system to make it more compatible with the Hague Agreement.

Other countries have been recognized for having good industrial design protection laws. Australia, in particular, has two interesting forms of intellectual property protection: Design Act of 2003 and Innovation Patents.

The Design Act of 2003 defines a registrable design as “new and distinctive when compared with the prior art base for the design as it existed before the priority date of the design.” Therefore, there is a two step analysis: “A design is new unless it is identical to a design that forms part of the prior art base for the design;” and, “A design is distinctive unless it is substantially similar in overall impression to a design
that forms part of the prior art base for the design.\textsuperscript{vii} As a side note, in addition to the substance of the Design Act, it is worth mentioning another wonderful Design Act feature: simple statutory language. Whereas even lawyer virtually needs the Rosetta Stone to fully understand 35 U.S.C. § 102, the Design Act is written in such terms that any layman could understand. If nothing else, the simple statutory language should serve as a model for all legislators.

An important part of the Australia Design Act 2003 is a provision that certain repairs do not infringe registered design. Section 702(1)(b)-(c) provides “(b) the product is a component part of a complex product; and (c) the use or authorization is for the purpose of the repair of a complex product so as to restore its overall appearance in whole or part.”\textsuperscript{viii} A complex produce is statutorily defined as one having two or more replaceable parts permitting de-assembly and re-assembly of the product.\textsuperscript{ix} Repair is limited to the restoration or maintenance of a product to keep it in good or sound condition. Initial governmental review of the spare parts suggested that final judgment on the provision would be premature, but no changes were recommended.\textsuperscript{ix}

More interesting than the Design Act is the Australian Innovation Patent. These innovation patents offer a “second-tier” level of patent protection similar to utility models used elsewhere around the world. The Australian Innovation patent was introduced in 2001 as a replacement to the petty patent system. The purpose of the Innovation Patent is to stimulate innovation among small and medium size businesses in Australia. An initial review of the Australian Innovation Patent system by the Intellectual Property Research Institute of Australia has found that the Innovation
This type of second-tier level of protection is something the United States lacks.

With the Innovation Patent, an innovator can elect to have his innovation examined and certified for even more protection. The Boardsling by Australian Nick Kent serves as a good case study for the Innovation Patent. The device looks simple: it’s a heavy-duty strap that clamps to the surfboard, effectively creating a handle for carrying the board. This invention was new and useful, but it did not meet the standards for a standard patent. Instead, Mr. Kent sought two innovation patents. The Australian government says, “The innovation patent is particularly useful for the needs of a small business like Nick’s. It is a relatively fast, cost effective and flexible mechanism for protecting and commercialising intellectual property.” [sic] The protection offered by the innovation patent allows Nick stop other from copying the Boardsling.iii

The innovation patent offers eight years of protection, compared to twenty years for the standard patent in Australia. An eight year monopoly is substantial for second-tier protection. The application can have a maximum of five claims. Like most of the world, the innovation patent uses a first-to-file method for establishing priority – twelve-month provisional patents are used as well. The application receives a cursory examination and then issues. The innovation is also published upon issue. However, if the innovation patent holder seeks to pursue an infringement claim, the innovation must first undergo a certification to determine the “innovative step.” This certification can be requested at any time during the life of the patent.iv
Relatively fast, cost effective, and flexible are not adjectives anybody would use in association with the USPTO. While there are many ideas the United States could incorporate from other countries around the world, no one country serves as a paragon of industrial art protection. There is real opportunity for America to take a leadership role in protecting an important economic resource.

**Part IV: The History of Sui Generis Design Protection Initiative in American**

The idea of sui generis design protection is not new. Even as early as 1909, France passed a sui generis design protection statute for industrial design. The most recent serious attempt at sui generis design protection was the Moorhead bill in 1983. The Moorhead bill was actually an attempt to amend the Copyright Act to protect commercial design. The bill proposed to offer copyright protection to the creator or an original ornamental design of a useful article. Original is an important term, since protection would not denied to design considered “staple or commonplace.” Protection would be done through a registration system, and this registration would last for ten years, but could be renewable. The bill even imagined placing a letter “d” in a circle, similar to the familiar copyright symbol, to provide notice of a registered design. Unfortunately, the Moorhead Bill ultimately proved unsuccessful for many reasons – including the automobile insurance industry, discussed later – one of which was the conceptual difficulty of using Copyright to protect industrial design.

There has been one rather small, but successful attempt at sui generis design protection. The Vessel Hull Design Protection Act (“VHDPA”). 17 U.S.C § 1301 was
enacted in October 1998. This act allows the design of boat hulls to be registered with the US Copyright office. This originated when the state of Florida tried to offer protection for Boat Hull designs. Citing the Supremacy Clause, the Supreme Struck down the Florida statute in *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.* As a result the VHDPA was created.

Only three steps are required to register a boat hull design. The first is to fill out a form D-VH. The introduction to this form states, “Form D-VH should be used for the registration of an original design of a vessel hull that makes the hull attractive or distinctive in appearance to the purchasing or using public.” The second step is to deposit materials identifying the design. And the third step is to pay the registration fee. As of this writing in May 2011, less than 500 boat hull have been registered under the VHDPA; a full catalogue of the protected designs can be viewed online at the Copyright office website. More than a decade later, many are starting to question the overall success of the VHDPA.

The single biggest problem with sui generis design protection, in both the United States and Europe, is the automobile insurance lobby. Original Engine Manufacturer (OEM) replacement parts are, of course, of the same quality as the original parts, but they are also much more expensive than third-party replacement parts.

The issue of automobile repair is not a minor obstacle. Consumer groups have been vigorous advocating for rights to produce aftermarket parts, claiming the right to repair will provide more options for auto repair, lower prices, and not compromise
trade secrets and intellectual property. One such group is the Automotive Aftermarket Industry Association is a network of more than 100,000 repair shops, parts stores, and distribution outlets nationwide. Another important group is the Coalition for Auto Repair Equality (CARE) and it is currently urging the passing of The Right to Repair Act. The legislation would require car manufacturers to provide service information and tools to independent service shops.

When it comes to automobile parts the standard for design protection is muddy. For example, *Chrysler Motors Corp v Auto Body Panels*, found that the Dodge Dakota fender “design is predominately dictated by functional considerations and thus not eligible for design patent protection.” Again, this is an example of the blend of design and function being denied legal protection.

Non-OEM automobile replacement parts were not on the market in a meaningful way until the 1980s. In the 1960s and 1970s there were many complaints that automobile manufacturers had monopolies over parts. For example, in 1992 an OEM Toyota Camry replacement fender cost $253. In 1993 a non-OEM replacement fender cost only $202. Three years later in 1996, the OEM fender cost $143.88 while the aftermarket post cost only $60. It appears that the aftermarket parts were not only more affordable initially, but over time aftermarket parts drive down the cost of OEM parts.

For any future sui generis design protection initiative to work, the most important issue is that of replacement parts.

**Part V: An Argument for a Re-Newed Sui Generis Industrial Art Protection**
As stated earlier the Second Circuit Court of Appeals stated, “While the RIBBON Rack may be worthy of admiration for its aesthetic qualities alone, it remains nonetheless the product of industrial design. Form and function and inextricably intertwined in the rack, its ultimate design being as much the result of utilitarian pressures as aesthetic choices.” The RIBBON Rack generated millions in revenues, which mean jobs and wealth. Form and function inextricably intertwined is goal of sophisticated industrial design, and this type of work enhances utility and adds value to a given product.

In 1987 Judge Giles S. Rich said during senate hearings regarding sui generis industrial design law, “The main purpose of the bills before you is to create a more equitable, practical and workable law for the protection of ornamental designs than the inequitable conglomerate we now have, namely, inadequate patents, overprotective copyright and a great middle ground still inadequately provided for.” Equitable, practical, and workable are excellent goals for any new design protection initiative.

Congress should promote the resources America has in abundance right now compared to the rest of the world: an educated and creative population. The problem inherent to design is that it is a non-competitive resource. If one copies another’s design, the original party does not lose his design in the same he would lose a loaf of bread if his neighbor were to steal it. Therefore, the law needs to set up a system that makes design a competitive resource – if one person has it, another cannot have it. This type of artificial market is necessary to give good design the value it deserves.
Though previous sui generis efforts have failed, this is not because sui generis protection is a bad idea. Instead, there are two factors which make sui generis design protection ripe for reconsideration: first, the natural economic shift from manufacturing to information is well afoot; second, people do not have a good understanding of what industrial art is. Unless one really takes time to notice and study industrial design, its an art form that can easily be taken for granted. Now is the right time for another effort at promoting separate protection for industrial design.

First, sui generis industrial art protection should take the form of a registration system, more similar to fine art (copyright) than useful art (utility patents). There are two reasons for this: government employees should not be a position to make an initial judgment on whether industrial art qualifies; also, an examination system is just too slow. As the Australian certification system demonstrates, it is practically pointless to examine designs that are not really subject to litigation. Instead, design protection should use the two-step process of an initial registration with cursory review. A subsequent full examination should be available upon request if monopoly rights are sought to be enforced. This type of post-issue certification would save examiners a lot of for designs and industrial art.

While the Vessel Hull Design Protection Act represents an important effort toward the next-generation of design protection, the VHDPA also demonstrates why design protection has should not merely be a component of copyright. Less than 500 hull designs have been registered since the VHDPA. The main problem is it is still very easy to design around registered Hulls. Another major problem with the Copyright Act
This whole notion of separability goes against the principles of good industrial design.

Useful arts (utility patents) should be held to the higher standard than industrial arts because usefulness is exclusive – a thing at its most rudimentary level only functions in one way. Alternative functions will not necessarily accomplish the same result. The industrial arts just enhance usefulness. If a person reserves one method of enhanced usefulness, there are usually a variety of other enhanced usefulness options. What is enhanced usefulness for one person may not be for another. For one person a minimalist Bauhaus design may enhance usefulness by eliminating distractions. Determining the success of a function is relatively objective process that an examiner is well equipped to handle, but what design enhances an object is subjective and cannot be determined by an examiner.

Under a sui generis industrial art protection infringement should be determined by an overall substantial similarity test, not unlike copyright. Although, Australia makes a critical word choice is defining design infringement by overall “impression,” as opposed to mere appearance. Trade dress, copyright, trademark protect appearance. But appearance is only one way to view a product. Industrial art should protect the entire impression of the object that enhances utility: including but not limited to weight, material, size, strength, texture, etc. The real goal of industrial design is to enhance utility. When utility is enhanced, the product has more productive value.
The main problem with design patents is that there is only one claim. Until 
*Egyptian Goddess*, there was a point-of-novelty test that analyzed design. Now the courts 
have moved back to substantial similarity, but there is still a strong temptation to 
employ point of novelty because design patents only allow a single claim.

In regards to infringement, the Court in *Gorham* noted, “[F]or human ingenuity has never yet produced a design, in all its details, exactly like another, so like that an expert could not distinguish them. No counterfeit bank note is so identical in appearance with the true that an experienced artist cannot discern a difference.” The in *Gorham* quite correctly held for an ordinary observer test, as opposed to a heightened expert standard, and this test should still stand.

An obviousness test would not be necessary in a sui generis industrial art system. Instead, the issue of obviousness should be adequately covered by the essential-to-function role. Unlike utility, there is extra danger in allowing the judiciary or bureaucrats making artistic designs. In fact, as Jonathan Ive of Apple decided, his goal in design is to seem obvious. In the world of design, there is a big difference between appearing obvious and being obvious. Between prior art and essential to function, the purpose of the obviousness requirement is covered.

The biggest hurdle for sui generis design protection by far will be the insurance companies who favor the wide availability of aftermarket parts. If a car company applies for design protection for a car, Insurance companies worry there will a lack of reasonably priced replacement parts. Two strategies can overcome this issue. First, limit
the term of sui generis design protection. Things usually do not need repair right away, strong but short-term design protection should present little problems to availability of replacement parts. Second, Congress could right in some sort repair-reconstruction permission that analogous to what exists in utility patents, and analogous to the Australian repair exception contained in the Design Act 2003. The Australian allows repair on complex objects – those having two or more replaceable parts – and repair is statutorily defined as restoration, as opposed to reconstruction. Clearly, objects such as bumpers and windshields are candidates for repair, and should be exempted from design protection. The 111th Congress already considered adding repair exemptions to the patent act. Such an exemption would probably be necessary to sui generis industrial art protection.

Industrial art protection should not be based on tort theory, namely consumer protection, but on a property theory. The innovator should enjoy the benefits of his work. Between unfair competition, trademark, and various other consumer protection measures, a diligent consumer can easily avoid knock-offs. The new sui generis design protection should combine the Moorhead Bill with Australian Design patent protection and Australian Innovation patent. As Dieter Rams stated as his first principle, good design is innovative. The United States has not fully taken advantage of value of good design. Offering sui generis industrial art registration, the United States can remedy the problem of inadequate design and encourage innovation, particularly among small and medium size enterprises.


Objectified (Plexi Productions 2009).


Egyptian Goddess, Inc. v. Swisa, Inc., 534 F.3d 665, 670 (Fed Cir 2008) (quoting Gorham Co. v. White, 81 U.S. 511 (1879)).


Flickr Picture of Fender Stratocaster Guitar


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see 489 U.S. 141 (1989).


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908 F.2d 951, 954 (Fed Cir 1990).

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