Apple v. Samsung: Design Protection and Consumers

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Abstract
Nidhi Garg writes an article about how design patent protection affects product lines and the average consumer. The analysis is done in light of the case between Apple and Samsung over patents relating to iPhones and iPads. The article focuses on design patent protection and how it has evolved over history. After an analysis of the laws, regulation, and case law related to design patents the article describes how consumers are affected by such changes. More particularly, how overreaching design patent protection may improve product lines and/or decrease innovation and product selection.

Keywords
apple, samsung, design patents, smart phones
APPLE V. SAMSUNG: DESIGN PATENT PROTECTION AND CONSUMERS

Nidhi Garg

Apple Inc. ("Apple") is a multinational corporation that sells personal computers and a wide range of consumer electronics. In 2007, Apple for the first time released its most popular product, a revolutionary smart phone, the iPhone.\(^1\) Apple has obtained numerous patents on all the features and designs implemented in the iPhone. The number of patents for the iPhone increases yearly because of all of its updated versions, which were manufactured and distributed exponentially over the years. Samsung is another multinational corporation that manufactures and distributes a wide range of consumer electronics. Samsung also has thousands of patents protecting its various smart phones. Samsung and Apple have an ongoing competition in which each are continuously striving to be one step ahead of the other in order to maintain a large number of consumers and even more importantly, not lose their consumers to their primary competitor. In this ongoing competition between Samsung and Apple, both corporations invest in making their smart phones more appealing and user-friendly via its appearance and functionality.

On August 24, 2012, a jury on the Apple v. Samsung case returned a verdict in the long, legal battle over several Apple patents relating to Apple’s iPhone and iPad. The jury submitted a verdict awarding Apple 1.05 billion dollars as damages that must be compensated by Samsung.\(^2\)

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1 John Markoff, New Mobile Phone Signals Apple’s Ambition, N.Y. TIMES (Jan, 9, 2007) http://nytimes.com/2007/01/09/technology/09cnd-iphone.html?_r=0.
The jury found that Samsung had infringed upon related Apple iPhone design and utility patents.³

Apple is the owner of several design and utility patents for smartphones and tablet computers.⁴ The jury had found that Samsung had infringed upon several utility and design patents relating to the iPhone. More particularly, U.S. Design Patent Nos. D 593,087 (“the D’087 patent”) and D 618,677 (“the D’677 patent”) that are both directed toward designs that implemented in the iPhone. These patents were issued on May 26, 2009, and June 29, 2010, respectively. Both patents claim a design for a rectangular smartphone consisting of a large rectangular display occupying most of the front face of the phone.⁵ Furthermore, the details of the patents display a phone where the corners of the phone are rounded. The patents add details such as a rectangular speaker slot above the display and a circular button below the display described in several figures of the patent.⁶ The D’087 patent claims a bezel surrounding the perimeter of the phone's front face and extending from the front of the phone partway down the phone's side.⁷ The parts of the side beyond the bezel, as well as the phone's back, are disclaimed, as indicated by the use of broken lines in the Figures displayed in the above-identified patent.⁸ The D’677 patent does not claim a bezel, but instead claims a black, highly polished, reflective surface over the entire front face of the phone.⁹ The D’677 patent disclaims the sides and back of the device.¹⁰ Apple claimed that Samsung’s smartphones, Galaxy S-4G and the Infuse 4G, infringed upon Apple’s D’677 and D’087 patents. The jury found that the above-mentioned

³ Id.
⁵ Id.
⁶ Id.
⁷ Id.
⁸ Id.
⁹ Id.
Samsung smart phones infringed upon Apple’s D ‘677 patent.\textsuperscript{11} Note that this was only one of the many findings that led to the famous 1.05 billion dollar judgment.

Today, the war between Apple and Samsung continues while Samsung appeals the case with the contention that the jury’s decision is harmful for consumers. Samsung states that this decision is harmful to consumers because now there will be less competition, fewer products, and thereafter the verdict minimizes innovation for upcoming technical industries.\textsuperscript{12} One issue that arises from the adjudication of this case, is the uncertainty of design patent protection. On one hand, it may lead to design patent protection to overreach its protection and limit the choices for consumers. On the contrary, it may drive companies to work harder on developing new and creative designs for their innovations.

Patent protection is for the benefit of the public as a whole. More specifically, it provides just enough protection to growing technology so that the public has an incentive to invent and invest in science and technology. Also, patent protection is limited so that the public can take advantage of such growing technology by having competing products within the same field of science. In light of this article, the actual consumer is analyzed. The article takes upon the view that consumers create the public, particularly, the part of the public that is interested in the product involved. For example, in the case in controversy, \textit{Apple v. Samsung}, the consumers for smart phones accumulate to make a great portion of the public that is affected by this particular decision. As a result, for different products associated with their relative patents, the targeted


consumers will once again make a great portion of the public that patent protection is directed to protect.

This case brought these two incentives of patent protection in light of design patent protection. This article explains the process of obtaining a design patent and the test of infringement. In understanding this, the contradicting perspectives are analyzed as to the benefits and harms to the average consumers.

Section I of the article analyzes the background of design patents. It distinguishes the three types of patents granted and how design patents differ from the more common type of patent – the utility patent.

Section II describes the process of obtaining a design patent and the change over the course of years of the patentability requirements that have become more stringent due to new requirements that have been adopted from utility patents such as the nonobviousness requirement. As discussed below, Samsung had claimed that Apple’s patents were invalid. In cases of patent infringement the accused tries to show that the patent in controversy is invalid. Section II of the article discusses how Samsung was unable to prove invalidity of the patents.

Section III of the article describes the process for a patentee to prove infringement for a design patent. This section goes into the history of design patent litigation and analyzes the fluctuation of court rulings over the years. In which the court rulings give a large scope of protection, to a smaller scope and then back to a larger scope of patent protection. Further, the article analyzes where Apple had proven Samsung products to infringe upon Apple’s ‘677 patent.
Section IV of the article discusses why it is important to have the ability to patent one’s design verses other forms of intellectual property. That includes copyright, trademark and trade dress protection. A patent is known to be the strongest form of intellectual property protection and several people criticize that this protection is being afforded to designs. However, Section IV describes how no other forms of intellectual property suffice to fulfill the objectives and concerns that design patent protection does. Therefore, this section assists in the analysis of the importance of design patent protection in the U.S. market.

Section V of the article discusses the competing interests revolving around patents and how it affects design patent protection. The competing interests are rooted in the first developments of patent laws and regulations. On one hand the rules try to provide the public with incentive to innovate with exclusivity in their invention, and on the other hand the rules try to provide the public with just enough protection so that other people can create competing designs that further enhance technology.

Section VI describes extensive design patent protection and how it affects companies who are patent holders or want to own patents. Before going in depth of speaking about the consequences for the consumer, this section of the article gives some prospective as to how inter-competition between companies will be affected and ways companies may or may not work around such extensive design patent protection.

Section VII analyzes the advantages and disadvantages of a large scope of protection afforded to design patents in light of consumers. This section analyzes the way designs of products have an affect on consumers and why it is important for companies to have unique designs to their products in order to maintain a number of buyers.
I: Background

A patent is granted by the United States Patent and Trademark Office ("USPTO") as a property right to an inventor for his or her invention.\textsuperscript{13} The rights granted for patent protection by the USPTO includes the right to, "exclude others from making, using, offering for sale, or selling the invention throughout the United States".\textsuperscript{14} These rights are conferred to the inventor, the assignee or whomever the patent is issued to for the exclusive use of the patent. Thus, a patent holder may file an infringement action against any person or entity that "makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent".\textsuperscript{15} In order to obtain said exclusive right over a patent for a term of years a person applying for a patent "an applicant" must meet several requirements set by the USPTO. The USPTO not only requires that an applicant has an invention but the applicant must have a \textit{patentable} invention, which is determined by how the applicant meets the given guidelines.\textsuperscript{16}

Generally, the USPTO generally grants three different types of patents to an inventor which includes: "(1) utility patents covering apparatus, processes or methods, machines, articles of manufacture, compositions of matter, or any improvement thereof; (2) plant patents for new varieties of asexual plants; and (3) design patents".\textsuperscript{17} Utility patents are the most common type of filings of the USPTO. A utility patent covers the functional features of an invention, regardless

\textsuperscript{14} 35 U.S.C.A. § 154 (2010).
\textsuperscript{15} 35 U.S.C.A. § 271 (West 2010).
of its form or appearance, whereas, a utility patent is unlike a design patent that is concerned with the ornamental designs of articles of manufacture. Specifically, a design patent may cover: (1) a surface design that is applied to an article of manufacture; (2) the shape or configuration of all or part of an article; or (3) a combination of both. As discussed below, the difference in the type of patent impacts the guidelines for an inventor to be granted the particular patent and to find infringement on that particular patent.

II: Design Patent Protection

The first law to provide patent protection to industrial designs was enacted in 1842. The statute contemplated protection for anyone who “may have invented or produced any new and original design for a manufacture.” At the time, an applied-for design patent only needed to be novel and original in order to be patentable. Over the years, however, courts have increased the requirements for the patentability of design patents. Design patent protection has been back and forth between over protection and under protection. Some scholars even note that United States has provided less protection to industrial design than other developed countries by having a high bar in granting a design patent.

19 Colin B. Harris, Andrew M. Ollis, DESIGN PATENT DAMAGES An Additional Remedy and Other Considerations, 2 LANDSLIDE 53 (2010).
21 Id at 437.
25 Mueller, supra note 23, at 452.
The U.S. design patent statute does not consider more in a design than novelty and originality for an inventor to obtain a design patent.\textsuperscript{26} In order for an inventor to obtain design protection today the inventor must satisfy the statutory requirements.\textsuperscript{27} The design patent must meet the three requirements, which are that the design must be patentable subject matter (35 U.S.C. 101), novel (35 U.S.C. 102), and non-obvious (35 U.S.C. 103).\textsuperscript{28}

For patentable subject matter the design must fall into one of three categories including “(A) a design for an ornament, impression, print, or picture applied to or embodied in an article of manufacture (surface indicia); (B) a design for the shape or configuration of an article of manufacture; and (C) a combination of the first two categories.”\textsuperscript{29} The theory is that, the appearance of the ornamental design creates an impression upon the mind of the observer, and this appearance is the subject matter of design patents.\textsuperscript{30} A design is ornamental if it presents a pleasing, aesthetic appearance that is not dictated solely by functional considerations.\textsuperscript{31}

In addition, to meet the patentable subject matter requirement, the design must be ornamental and not functional, specifically, the design must be visible in the end use of the article of manufacture.\textsuperscript{32} Therefore, if the design has a functional aspect that operates the utility of the article of manufacture then the patent would not be a design patent, but a utility patent.

Second, the design must fulfill the novelty requirement, which is provided under 35 U.S.C. 102 (hereinafter “section 102”).\textsuperscript{33} In order for a design to be regarded as novel, a design

\textsuperscript{26} Id. at 427-28.  
\textsuperscript{28} 35 U.S.C. §§ 102, 103, & 171 (1952).  
\textsuperscript{29} MPEP 1504.01 (8th ed. 9th Rev., Aug. 2012).  
\textsuperscript{30} Lindgren, supra note 17.  
\textsuperscript{31} Id.  
\textsuperscript{33} 35 U.S.C. §102.
cannot be “substantially the same” as a prior design, when viewed by “an ordinary observer, giving such attention as a purchaser usually gives.”\textsuperscript{34} The degree of difference required to establish a novelty sufficient to authorize granting a design patent occurs when an average observer would view the new design for a different design, and not as modified already-existing design.\textsuperscript{35} Therefore, a slight difference between an applied-for and an already existing patent would not give rise to patent protection in the applied-for patent, this would award an applicant with a monopoly in a design consisting solely of a small tweak to an already existing patent would be against public policy.\textsuperscript{36}

Finally the design must fulfill the requirement of nonobviousness under 35 U.S.C. 103 (hereinafter “section 103”).\textsuperscript{37} Nonobviousness for a design is the ultimate, most difficult requirement to obtain in a patent.\textsuperscript{38} Unlike the novelty test, which considers the design to the ordinary observer, the test for non-obviousness is judged from the eyes of an ordinary designer.\textsuperscript{39} A design to be patented is non-obvious when, in the eyes of an ordinary designer, the design to be patented is not an apparent derivation of a prior design.\textsuperscript{40} In proving that a design is nonobvious, a number of factual inquires are made, including “the scope and content of the prior art are to be determined; differences between the prior art and the claims [, or design] at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved.”\textsuperscript{41}

In regards to the Apple v. Samsung case, one of the patents in controversy, the D’677 patent, protects the design of the iPhone. First, the D’677 patent protects the surface design:

\textsuperscript{34} Burstein, supra note 20, at 175.
\textsuperscript{35} Application of Johnson, 175 F.2d 791 (C.C.P.A. 1949).
\textsuperscript{36} Id. at 792.
\textsuperscript{37} 35 U.S.C §103.
\textsuperscript{38} Mueller, supra note 23, at 424.
\textsuperscript{39} Cook, supra note 32, at 110.
\textsuperscript{40} Id.
which consists of a highly polished, reflective surface that covers over the entire front face of the phone, and is considered to be an article of manufacture. In addition, the D’677 patent applies to the shape or configuration of the phone’s reflective surface, which consists of a large rectangular display occupying most of the phone’s front face.\(^{42}\) The corners of the phone are rounded. The latter part could be considered the shape and configuration of the whole part of the phone. Therefore, design patent D’677 covers both aspects of a design patents. It can also be noted that the patent does not cover any functional or operation features of the iPhone. As a result, the D’677 applies to a design patent versus a utility patent.

Once a design patent is issued by the USPTO, it may potentially be invalidated during an infringement action by the challenger or any party who is claimed to have infringed on a patent. In such a case, a challenger will try to show that the newly issued patent should be invalidated by submitting clear and convincing evidence of prior art that either anticipates the design patent, which relates to the novelty requirement of patentability, or makes the design patent obvious. The incentive to prove the patent in controversy to be invalid is that there can be no infringement on an invalid patent. For example, in the battle between Apple and Samsung, Samsung claimed that, among others, Apple’s D’677 patent was invalid because it was not patentable in light of the prior design in Japanese Patent No. 1,241,638.\(^{43}\) The court considered the Japanese Patent No. 1,241,638 and concluded that the '638 design was sufficiently different from the D'677 patent, because it would not have been obvious to a designer to adopt certain features contained in the

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\(^{43}\) Apple Inc. v. Samsung Electronics Co., Ltd., 678 F.3d 1314, 1319 (Fed. Cir. 2012)
Therefore, the court held that Samsung had not raised a substantial question regarding the validity of Apple’s D’677 patent.  

The jury found that none of Apple’s patents were invalid. Even though they found that none of Apple’s patents were invalid, the jury still did not find that Samsung products infringed on all of Apple’s patents. As discussed below, the terms of infringement are larger and more complicated than merely refuting the affirmative defense of invalidity.

**III: Infringement of a Design Patent**

As defined under 35 U.S.C. § 289 an infringement of a design patent includes, “during the term of a patent for a design, without license of the owner, (1) applies the patented design, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or (2) sells or exposes for sale any article of manufacture to which such design or colorable limitation has been applied shall be liable to the owner to the extent of his total profit.” Infringement does not require absolute identity between the patented design and the accused design. The patentee must prove, however, that the accused design appropriates aspects or features in the patent design that distinguishes it from the prior art.

In the early years of intellectual property law, design patents were not given much protection. The Supreme Court first addressed design patents in the landmark case of *Gorham Co. v. White*. Gorham involved a design patent directed towards a pattern for handles of silverware. In *Gorham*, the Supreme Court took up the task of setting forth the proper standard

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44 Id.
45 Id.
48 Id.
for determining infringement of a design patent by establishing the Ordinary Observer Test, which states, “if the eye of an ordinary observer cannot distinguish between two designs, they must in law be substantially alike.” 49 In establishing such a test, the Supreme Court established the foundation of what is now known as the first part of design infringement test, the Ordinary Observer Test:

“The law manifestly contemplates that giving certain new and original appearances to a manufactured article may enhance its salable value, may enlarge the demand for it, and may be a meritorious service to the public. It therefore proposes to secure for a limited time to the ingenious producer of those appearances the advantages flowing from them... It is the appearance itself, which attracts attention and calls out favor or dislike. It is the appearance itself, therefore, no matter by what agency caused, that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense. The appearance may be the result of peculiarity of configuration, or of ornament alone, or of both conjointly, but, in whatever way produced, it is the new thing, or product, which the patent law regards.” 50

In other words the court concluded that having experts evaluate the differences of the designs would in some sense be useless. Infringement would be difficult to find, because an expert could always find a difference between the two product designs. Furthermore, the designs are supposed to be viewed through the eyes of the ordinary observer who is the purchaser of the given article. Therefore, the court laid out the foundation of the Ordinary Observer Test. 51 The Court's decision to apply the infringement standard from the perspective of an ordinary observer allows for an end user or consumer to measure the relative value and importance of design features, as is intended by designers. In addition, the Court recognized that a design's primary

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49 Mueller, supra note 23, at 470.
51 Id.
purpose is to make the underlying product more appealing to consumers, and therefore the overall end appearance of the product is the only truly “useful” aspect of the design.\(^{52}\)

Although the Court in *Gorham* established the Ordinary Observer Test, such test has been clarified with more specific instructions over time.\(^{53}\) Today, the design must be viewed as claimed in the patent.\(^{54}\) In other words, in order for an infringement claim to be a valid infringement claim the infringer cannot include only a part of the patented design.\(^{55}\) Instead, the infringer must incorporate the overall design. Furthermore, it must be the claimed elements of the design, not the commercial embodiment of the design.\(^{56}\) This requirement limits the courts to find infringement based on the patented design verses the commercial product.\(^{57}\)

In addition, “both the doctrine of equivalents and patent prosecution history estoppel play a role in determining design patent infringement”.\(^{58}\) The doctrine of equivalents is only applied to the Ordinary Observer Test.\(^{59}\) “The doctrine of equivalents prevents an infringer from avoiding infringement by making trivial changes to a design”.\(^{60}\) As a result, the doctrine is so that one may not practice a fraud on a patent.\(^{61}\) In which case, when the court uses the doctrine of equivalents the original test must satisfy the original Ordinary Observer Test established in *Gorham*, that is, that an ordinary observer will confuse the infringing design for the patented design.\(^{62}\) For example, a transparent glass laptop casing would be an equivalent for a transparent plastic laptop, which has the appearance of glass. Patent prosecution history estoppel is where

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\(^{52}\) Mueller, *supra* note 23, at 472.

\(^{53}\) *Gorham*, 81 U.S. at 522.


\(^{55}\) Contessa Food Prods., Inc. v. Conagra, Inc., 282 F.3d 1370, 1378-79, 1382 (Fed. Cir. 2002).


\(^{57}\) Cook, *supra* note 32, at 113.

\(^{58}\) Id.

\(^{59}\) Id.

\(^{60}\) Id.


\(^{62}\) Cook, *supra* note 32 at 113.
the record made during the prosecution of the patent is used against the patentee as to the scope of the invention. Therefore, in cases of design patents, reference is made to the prosecution history in order for the court to apply the appropriate weight to the right factors that actually contributed to the patentability of the design.

Over one hundred years later, after the Supreme Court’s decision in Gorham, the United States Court of Appeals for the Federal Circuit, adopted an additional criterion for a patent holder to prevail in infringement suits, which has become known as the Point of Novelty Test (PON). If the patentee prevails on the Ordinary Observer Test, then the second test is the Point of Novelty Test. Make note that the Ordinary Observer Test is the primary test and used by courts more stringently.

The PON was referred to in earlier cases where courts had clearly established the scope of the Ordinary Observer Test. However, the PON test was actually first established in Litton Systems Inc. v. Whirlpool Corp. The Point of Novelty test states that “in order to constitute infringement there must be an appropriation of the novel elements of the patented design” by the alleged infringing design. A point of novelty is an element or elements of the patented design that distinguishes the patented design from previous designs. Litton acknowledged that while “minor differences . . . shall not prevent a finding of infringement,” the similarities between the patented and challenged design may be based upon a configuration commonly known in prior

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64 Cook, supra note 32, at 113.
67 Kruttschnitt v. Simmons, 118 F. 851, 852 (S.D.N.Y. 1902) (upholding the decision that a design patent for a scroll figure within a borderline was infringed).
68 Cook, supra note 32, at 112.
art.\textsuperscript{69} For example, although the disputed microwaves in \textit{Litton} admittedly looked similar “in the eyes of the casual buyer,” the similarity was a common feature implemented by several microwave ovens than what were currently on the market. \textit{Litton}, first required a prior determination of the patented product's PON so that the fact-finder may compare this particular novelty against the alleged infringer's design.\textsuperscript{70}

After \textit{Litton}, courts spent years varying the rules on how to manage the two tests in relation to one another. Shortly after \textit{Litton}, courts viewed the two tests as conjunctive.\textsuperscript{71} Later, however, it was viewed as two distinct tests.\textsuperscript{72} In the landmark case of, \textit{Egyptian Goddess, Inc. v. Swisa Inc.}, the Federal Circuit court overruled \textit{Litton} and decided to no longer use the Point of Novelty test in determining design infringement and once again broadened the scope of design patent protection.\textsuperscript{73} The court found that the Point of Novelty test is inconsistent with the Ordinary Observer Test as laid out in \textit{Gorham}.\textsuperscript{74}

The \textit{EGI} court first noted the problem with the Point of Novelty test. The problem is that the PON test has proven to be difficult to apply in cases with designs that contain several different features that can be argued to be points of novelty in the claimed design: “The attention of the court may therefore be focused on whether the accused design has appropriated a single specified feature of the claimed design, rather than on the proper inquiry, i.e., whether the accused design has appropriated the claimed design as a whole”.\textsuperscript{75} The court further identified that the more novel the design, and the more points of novelty that are identified, the more

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\textsuperscript{69} \textit{Litton Sys}, 728 F.2d at 1444.
\textsuperscript{70} \textit{Ngo, supra} note 65, at 115.
\textsuperscript{71} \textit{Egyptian Goddess, Inc. v. Swisa, Inc.}, 543 F.3d 665, 672 (Fed. Cir. 2008).
\textsuperscript{72} \textit{Ngo, supra} note 65, at 115.
\textsuperscript{73} \textit{Id}.
\textsuperscript{74} \textit{Id}.
\textsuperscript{75} \textit{Id}. 
opportunities there are for a defendant to argue that its design does not infringe because it does not copy all of the points of novelty, even though it may copy most of the essential point and the overall appearance of being identical to the claimed design. Therefore, a test that asks how an ordinary observer with knowledge of the prior art designs would view the differences between the claimed and accused designs is likely to produce results more in line with the purposes of design patent protection.

Ultimately, the EGI court emphasized solely on the Ordinary Observer test and also established that the burden of proof was on the patentee. Thus, as is always the case, the burden of proof as to infringement remains on the patentee. However, if the accused infringer elects to rely on the comparison prior art as part of its defense against the claim of infringement, the burden of production of that prior art is on the accused infringer.\textsuperscript{76} The accused infringer is the party with the incentive to point out close prior art, and in particular, draw the court's attention to the prior art that an ordinary observer is most likely to regard and highlight the differences between the claimed and accused design. Regardless of whether the accused infringer elects to present prior art that it considers pertinent to the comparison between the claimed and accused design, the patentee bears the ultimate burden of proof to demonstrate infringement by a preponderance of the evidence. However, it is not yet known if the “future ordinary observer” is one who casually views the design for the first time, or views it professionally for the hundredth time.\textsuperscript{77}

In an infringement action, intent or willful conduct on the part of the alleged infringer is irrelevant,\textsuperscript{78} and it is the patentee’s burden to prove infringement by meeting the ordinary

\textsuperscript{76} Egyptian Goddess, 543 F.3d at 678.
\textsuperscript{77} Egyptian Goddess, 543 F.3d at 678.
observer by a preponderance of the evidence. As a secondary, the patentee can use the point of novelty test to show infringement, however, the Ordinary Observer test remains the dominant test as it is broader and provides more protection to the patentee. Therefore, if the Ordinary Observer Test fails then in most cases, infringement cannot be found.

The accused infringer can use affirmative defenses against the patentee, such as claiming a mere functional similarity between the two products, or claiming that the patent is invalid, with such affirmative defenses also requiring clear and convincing evidence. If infringement is proven, the infringer is “liable to the owner to the extent of his total profit”. As a result, the infringer does not get to apportion his profit to account for the profit he received from the infringed design alone. Whereas in utility patents the infringer is allowed to apportion his profits, so that he is liable only to the profits made from the infringing product. The holding in Egyptian Goddess has broadened the protection afforded by issued design patents and the potential protection afforded by pending design patent applications.

In the battle between Apple and Samsung, the jury found that Samsung’s smart phones had not passed the Ordinary Observer Test as laid out in Egyptian Goddess, and that a consumer would find no difference in the designs of Apple’s D’677 patent and Samsung’s smart phones. Therefore, the jury concluded that that Samsung’s smartphones had infringed on Apple’s D’677 patent.

An interesting aspect of the Ordinary Observer Test, is that the damages of an infringer is many times left for a jury to decide – which is a highly criticized procedure. The Federal Circuit

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79 Lee, 838 F.2d at 1187.
81 Katz, supra note 47, at 120.
recognizes that the Seventh Amendment’s guarantee of a right to trial by jury applies to patent infringement cases. Litigants did not initially prefer jury trials, however, starting in the mid-1980s, more litigants prefer jury trials. The reason for this increase in popularity has been attributed to the perceived juror bias that favors patent holders and that too with large damages. A fact-law inquiry for the obviousness requirement involves three steps: (1) articulate the legal standards; (2) identify the relevant facts; and (3) apply the law to the facts. In jury trials, the judge performs the first step and the jury performs the second step. “By submitting the ultimate issue as to obviousness to a jury, district courts are abdicating their duty to conduct an independent analysis.” In critical analysis: this procedure also prevents meaningful review of the determination on appeal since it is done the same way on appeal. Furthermore, the use of lay juries has proven problematic in the patent law context because of the complexity of patent laws. Thus, jury awards tend to be large, biased and unfavorable.

The jury verdict in Apple v. Samsung is another potential issue addressed in the case. Since the jury decided the designs were similar and the amount of damages – they may not have understood the intricacies of patent law infringement before submitting such high damages for Samsung, and as a result Samsung may have been subjected to an unfair result.

IV: Forms of Design Protection

85 Id.
87 Demory, supra note 84, at 458.
88 Id.
89 Id. at 460.
The question remains whether there is an actual need to patent a design or could other forms of intellectual property suffice as an adequate form of protection for designs. Patent protection is said to be the strongest intellectual property protection because of its scope of protection and the exclusivity provided to patent holders. Although it is the most powerful type of protection, it is the most difficult to obtain in regards to the nonobviousness and the novelty requirements discussed above. The issue remains, is whether designs should be afforded such protection. So the question lingers: why can’t other forms of intellectual property protection that covers artistic expression or shapes and configurations also cover design for articles of manufacture?

The interest of affording alternative forms of protection instead of patent protection is that other forms of protection can be simpler to obtain and at the same time only provide a limited amount of protection to the design holder. The three alternatives that are apparent replacements are copyright, trademark or trade dress. Trade dress is a form of trademark with a unique aspect, which will be discussed below. Even though, all three types of design protection: copyright, trademark and trade dress, are similar to design patents, none of these meet the same needs and objectives as design patent protection.

“Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” 90 Copyright law protects “original works of authorship” and gives the author a limited monopoly over their original work. 91 The author has the exclusive right to

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reproduce, distribute, perform and display the work as well as to create derivative works based upon the work.\textsuperscript{92} Copyright protection extends for the life of the author plus 70 years, or, in the case of a corporation, the lesser of 95 years from publication or 120 years from creation.\textsuperscript{93} There are no requirements of novelty or nonobvious that copyright protection seekers have to go through. Furthermore, it does not require a registration process. Copyright protection begins when the original work is fixed to tangible medium of expression. It is moreover a simple and attainable process, and does not require, but only suggest actual federal registration. From the artist's perspective a relaxed standard of protection overcomes some the restrictive process of the design patent.\textsuperscript{94} There is no need for copyrighted works to be novel or nonobvious, as a result eliminating the design’s merits on the article of manufacture.\textsuperscript{95} As discussed above, designs patents protect ornamental designs that are designated for articles of manufacture. If such designs were not required to go through novelty or nonobviousness then many articles of manufactures would look similar, and not be necessarily distinguishable. The lack of such strict requirements can be afforded and actually beneficial in copyright law. In essence of novels, paintings, cartoons and etc, which are usually afforded copyright protection one difference in the plot can distinguish two romance novels. For example, a painting of the same ocean can be done in numerous ways, and each painting can obtain a special value regarding paint colors, texture, angle and/or etc. On the other hand, the design of an i-phone, merely colors, textures and angles may not be sufficient to establish one design to be novel and/or nonobvious over the previous design. Therefore, if design patents still want to be regarded as ornamental designs for articles of manufactures copyright requirements do not suffice.

\textsuperscript{92} Id.
\textsuperscript{93} Id.
\textsuperscript{95} Id.
Furthermore, a major issue with using copyrights to protect designs of articles of manufacture is that copyright protection does not distinguish between functionality and design. The separability doctrine in copyright – which defines that copyright protection only pertains to the design and not the actual functionality – is not defined in copyright law. Instead the separability doctrine is unclear and is open to the court’s discretion. Whereas, when obtaining a design patent the minimal requirement is to establish that the distinction between functionality and design of the product and hence the patent can only protect the design is clearly enforced. The lack of clarity in copyright law is vulnerable to the abuse of the system to obtain protection over functional items that may not necessarily be patentable. For example, a new smart phone with a totally different design could obtain copyright protection, which in turn also protects the functionality of the smart phone. In such a case the smart phone itself may not be viable for any sort of functionality protection afforded from the government. People who want to dodge the patent process could easily just add a design on a functional item and claim the integrated product as deserving copyright protection. As a result, using copyright to protect designs violates a fundamental objective of intellectual property law and does not offer much help to designers. Even assuming that this confusion could be removed, however, a deeper question would remain regarding whether the potential for patent smuggling is worth the benefits of broad design protection through copyright.

Similar to copyright law – trademark law also has a different objective than design patents in protecting designs. Trademark law emphasizes protecting consumers from confusion

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96 Id.
97 Id.
98 Id.
to foster fair competition and to justify a more extensive right.\textsuperscript{99} According to the Lanham Act, these are protectable under federal law so long as they are “used by a person” in commerce in a distinctive way “to identify and distinguish his or her goods . . . from those manufactured or sold by others and to indicate the source of the goods, even if that source is unknown”.\textsuperscript{100} There are two ways in which a mark can qualify as distinctive. First, certain marks are inherently distinctive, in that at the moment of first use in conjunction with a good or service, they are already capable of identifying a unique source of that good or service.\textsuperscript{101} Marks are considered to be inherently distinctive if they are arbitrary, fanciful, or suggestive.\textsuperscript{102} Alternatively, marks that are not inherently distinctive, but are descriptive of the particular good or service, can become distinctive if there is proof of secondary meaning.\textsuperscript{103} When registering a mark, the Patent and Trademark Office (PTO) “may accept as prima facie evidence that the mark has become distinctive . . . proof of substantially exclusive and continuous use thereof as a mark by the applicant in commerce for the five years before the date on which the claim of distinctiveness is made.”\textsuperscript{104} Secondary meaning arises once “the primary significance of the term in the minds of the consuming public is not the product but the [particular] producer” of it.\textsuperscript{105} When registering a mark, the Patent and Trademark Office (PTO) “may accept as prima facie evidence that the mark has become distinctive . . . proof of substantially exclusive and continuous use thereof as a mark by the applicant in commerce for the five years before the date on which the claim of distinctiveness is made.”

\textsuperscript{99} Id.
\textsuperscript{100} Jeanne C. Fromer, \textit{The Role of Creativity in Trademark Law}, 86 \textit{Notre Dame L. Rev.} 1885, 1887-88 (2011)
\textsuperscript{101} Id.
\textsuperscript{102} Id.
\textsuperscript{103} Id.
\textsuperscript{104} Id.
\textsuperscript{105} Fromer, \textit{supra} note 100.
Distinctiveness is made.” Distinctive marks used in commerce are protectable, either via registration and/or enforcement.  

An issue arises in trademark protection because ornamental designs in patent law are not for consumer source connection, but more for the appeal of the product. Trademark doctrine is different from the other branches of intellectual property because it is not concerned with stimulating the creation of new works. Instead, its goal is to ensure that each manufacturer has an incentive to mark its goods so that a consumer can identify the source, quality, and retail location of those items. As discussed later, the design of an article of the manufacture should be favorable to the consumer’s eye and make the technology more attractive to the consumer and possibly give the technology “personality”. However, the design does not connect the item to the source, like the Nike “Do It” symbol or the shape of a Coca Cola Classic bottle. The purpose of trademarks is to connect the particular design to the goods and services. Therefore, a designer working to obtain design protection would actually have to jump through more hoops in obtaining design protection and possibly have to change their design to meet the requirements for trademark protection.

Trade dress protection is the closest to meeting the design patent standards. Trade dress is an unclear and less obvious concept that provides protection that is analogous to trademark. While most marks are words or logos, there is a category of marks called “trade dress” that refers to the look of a product. Trade dress protection is a special benefit to plaintiffs who lack formal trademark protection, since trade dress protects the marketplace image of a plaintiff’s

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106 Id.
107 Id.
108 Id.
109 Magliocca, supra note 94.
110 Id.
goods, services or other commercial impressions. Due to this feature, trade dress should be of great interest to general practitioners, especially since trade dress protection is determined on a case-by-case basis. Trade dress is an open-ended term embracing the total image of a good or service and is protectable since it can be used to identify the source of the goods or services. However, the traditional methods of establishing secondary meaning are unchanged. Consumer surveys, sales activities and advertising efforts all remain important aspects in determining secondary meaning. In addition, intentional copying of a competitor's trade dress continues to be evidence of secondary meaning. It is apparent that even a “distinctive” trade dress might or might not be inherently distinctive. When the trade dress is different or the first of its kind is not sufficient for it to be labeled inherently distinctive. Inherent distinctiveness requires that the trade dress be unique or different in such a way that consumers with a particular source will automatically associate the trade dress. That is to say, inherent distinctiveness means distinctiveness that is indicative of the origin and/or source of the trade dress.

Trade dress also performs a purely esthetic function that opens the door to robust design protection. Some commentators have argued, however, that courts in trade dress cases went further and “consciously crafted the law to encourage the development of creative and pleasing designs” by giving protection to designs that were not really marks at all. However, trade dress

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112 Id.
113 Id.
114 Id.
115 Id. at 16.
116 Id.
117 Hardaway, supra note 111, at 17.
designs still require a secondary meaning.\textsuperscript{119} Few ornamental designs can obtain secondary meaning because crossing this magic threshold requires a great deal of time and advertising to create the necessary awareness among consumers. It may even costs more in obtaining a secondary meaning and being able to prove it in some unforeseen litigation.

In comparison to design patents, it is very difficult for an innovator to prevent others from copying a design during the period when it is trying to garner secondary meaning.\textsuperscript{120} The time the product first is put in the market place is crucial to a designer of an article of manufacture. If a competitor or multiple competitors use the design prior to the design trying to obtain a secondary meaning then the design is no longer viable for trade dress protection because it can no longer associate the feature with a single brand. More importantly, since patentable designs are commonly associated with products that have a short life span, for example a smart phone that is changed and updated within a two year time span at best, the owner of the design may not have enough time to wait for the design to establish a secondary meaning. As a result, the design of the product goes unprotected and becomes publically usable, and the article that the design covers is no longer distinguishable as to its appearance. Therefore, trade dress law does not align to the objectives of design patent protection for products that design patents are targeted to protect.

\textbf{V: Competing Interests for Design Protection}

The drafters of patent laws and system have sought to find a balance between over-protection of patents and not enough protection for the inventor. This is an ongoing controversy between providing inventors an incentive and thereafter-new technologies in public use verses

\textsuperscript{119} Id.
\textsuperscript{120} Id.
the monopolistic consequences of overreaching patent protection of inventions. In doing so, patent laws and patent cases have been reexamined to confirm that the requirements for patentability and the terms of infringement are adequate to satisfy the competing interests.

One interest is for the protection of inventors’ intellectual property. Not only is this right of protection provided by the U.S. Constitution, but also patent protection provides an incentive for inventors to create new inventions and disclose it to the public. The process of obtaining a valid patent is long, expensive and time consuming. However, as noted above, once a patent is granted it provides the patent holder an exclusive right in its invention for 20 years and in cases of designs 14 years. The disclosure of the invention in a patent provides public with the “how to” of the invention, and allows for other scientists to build upon the invention. As a result, the number of inventions increase and the country as a whole becomes technically advanced. Many commercialized inventions, which were patented, were the first to fill a perceived societal need. If infringement actions were not enforced than inventors may be less apt to put their invention in the market to fulfill the societal need. Pioneering inventions such as the light bulb, telephone, or latest generation antibiotic enabled their respective patentees to exert more power over pricing than in cases where substitutes were readily available. Furthermore, the protection of patents for the inventors’ exclusive right, making, and use etc. gives inventors the leverage and incentive to commercialize or license it without the fear of losing control over their invention.

The countering argument is that granting such exclusive rights limits innovation and creates monopolies for patent holders. Due to the exclusivity and scope of the patent protection,

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122 Id.
competing companies, or even uprising companies, are restricted as to the products they sell.

“The term monopoly connotes the giving of an exclusive privilege for buying, selling, working or using a thing which the public freely enjoyed prior to the grant”.\textsuperscript{123} Thus a monopoly takes something from the people.\textsuperscript{124} It provides a company with market power to determine the price of a product that is high on demand. Market power, which provides a company a monopoly over a product or range of products, is defined as a seller's capability to exert power over price; in other words, it is “the ability of a firm to raise prices above the competitive level without losing so many sales so rapidly that the price increase is unprofitable and must be rescinded.”\textsuperscript{125} The normal market forces for that product are disrupted for the period that the seller maintains the monopoly.\textsuperscript{126} As mentioned above, the patent right confers the right to exclude others from making, using or selling the patented invention for the statutory period of twenty years.\textsuperscript{127} Arguably, granting such a right inherently gives the seller some unique capability to dominate the market or control pricing at a competitive disadvantage during the term of the patent.\textsuperscript{128}

The two competing interests influence both the general public and companies that are either competitors of patent owners or are owners of patents themselves. On one hand it can create a monopolistic power for a company and impede competitors from growing. The monopoly power puts the power of a price in one company’s hand. On the other hand, the patent’s value, in filling a societal need and in the statutory disclosure requirements that enable others to invent additional pioneering devices, outweighs the effects of such monopoly power.\textsuperscript{129}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{123} Id.
\item \textsuperscript{124} Id.
\item \textsuperscript{125} Id.
\item \textsuperscript{126} Id.
\item \textsuperscript{127} Rose, supra note 121, at 515.
\item \textsuperscript{128} Id.
\item \textsuperscript{129} Id. at 516.
\end{enumerate}
\end{footnotesize}
As discussed above, Samsung comments to the jury verdict, that the case’s verdict will hurt consumers the most. It is an opinion shared by many that the less competition there is, the more likelihood that the economy will be subject to the pricings and power of major monopolies. The specific monopolies will be the few corporations that will be the sole owners of several patents and as a result will obtain the power to control the innovation. Thus, prices of highly industrialized products will be determined by the said monopoly and innovation will also be controlled (argued to be slowed down) by the said monopoly.

VI: Consequences for Companies

The final outcome of Apple v. Samsung makes a decision as to who wins the “smart phone case” and speaks to other companies from General Electric and International Business Machines to small engineering firms patenting one or two items annually. The case determines the power of patent holders to obtain protection, and how they can use it to maintain advantage over competitors. In essence, Samsung’s argument that Apple has now used the courts to shut down competitors that tried to advance upon functional designs that result in more competition and better products can be construed as a partially valid theory. Even though the current case may not come to a final decision for another couple of years, each step of the way illustrates the power of the patent holder. The case does not directly impact any particular design patent law or overrule a prior decision – but it speaks more to patents’ influence over the products the public uses every single day. In the current case, Apple has several utility and design patents in addition to other related causes of action. The fact that Apple can take rectangular corners and round corners and use it to stop a competitor from selling a smart phone that consumers around America use, demonstrates the potential power of such protection. This not only makes

\[130 \text{Id.}\]
competitors reluctant to risk a negative reputation and money in extended litigation over a controversial design, but it can inhibit new start-ups to create competing designs in fear of litigation from Apple or any other large corporation with several thousands of patents and millions of dollars allocated just for litigation.

A method for allowing more people to innovate using the technology claimed in one patent is for the patent holder to license rights to the patent. A patent holder can license all parts of the patents or parts of the patents in certain field areas. Licensing transactions have many areas from, exclusive to non-exclusive, to use in just one field to unlimited use. However, there are many advantages to the licensor (patent holder). First, the licensor has an upper hand from the licensee, considering the patent is essential to the licensee’s innovation. Second, the patent holder who can obtain satisfactory monopoly profits from making, using or selling the invention and excluding others from practicing it will have few reasons to license the patent.\textsuperscript{131} There are provisions to restrict the licensor’s ability to overreach in such a transaction.\textsuperscript{132} Patent licenses often contain certain restrictions, imposed upon the licensee by the licensor, as partial consideration for the license, \textit{e.g.}, the right to use the patented invention only within a certain field or within a fixed territory, or to manufacture a fixed quantity of the patented article. The quantity, royalty, price and other anti-trust concerns are all limitations to license.\textsuperscript{133}

Even with all these limitations on licensing – enforcement to secure such limitations is difficult. In some cases there is a 15-factor test to decide whether a reasonably royalty was negotiated between the licensor and licensee. In order to do so, the court engages in a

\textsuperscript{132} Id. at 465.
hypothetical negotiation between the licensor and licensee according to a 15-factor test.\textsuperscript{134} However, application of such test is inconsistent and can become confusing.\textsuperscript{135} As a result, judges use discretion and give some factors more important than the others which results in an inconsistency between courts and cases.\textsuperscript{136} Therefore, licensing may not be the most efficient remedy to the fear of minimal innovation caused by the potential extreme overreaching power of patents protection.

\section*{VII: Benefits and Harms to the Average Consumer}

Designs patents benefit patent holders as well as the average consumer. Consumers are inclined to purchase new technology by the look and feel of a product. When a highly technical product is first developed, an essential step of the commercialization process of the product is to figure out the design of the product. It is in view of innovative companies creating the new and upcoming design that a consumer’s reaction to the design of a product can instigate them to purchase the design.\textsuperscript{137} Today many companies have high technology to develop quality products for the average consumer. The design, look, and feel of a product gives one company an edge over another and allows them to target a population of consumers. For example, the design of a product like Apple's iPhone might invoke thoughts like “cool,” “sleek,” or “high-tech,” while the design for a 1950s Cadillac car might invoke thoughts like “classic,” “durable,” or “swell.” Certainly, thoughts like “cheap,” “unreliable,” and “boring” are to be avoided.\textsuperscript{138} Thus, consumers are attached to the technical product they purchase partially due to the design of the

\begin{footnotesize}
\begin{enumerate}
\item \textit{Id.}
\item \textit{Id.}
\item \textit{Id.} supra note 23, at 436.
\item \textit{Id.} at 437.
\end{enumerate}
\end{footnotesize}
product. Companies want to invest in making their products directed toward a particular audience. In the example of the Cadillac, which can be for a rich, older, and professional male, allows the car company to appeal to that particular population of car buyers. Similarly, someone who may buy an Apple I-phone may feel comfortable with the sleek, cool, or modern look. Whereas someone buying a blackberry may feel attached to the official, structured and business appearance of the phone.

So why is it important that consumers feel attached to the appearance of their technical products? First, the attachment forces consumers to become a consistent customer of one line of products. An iPhone user is less likely to buy a blackberry and *vica versa*. The image and design of a product is important and gives personality to the article thereby making it personal to a buyer. A design’s inherent shape, configuration, and etc. can speak to an individual’s stylistic preferences. Second, it creates a competition between companies to not only provide a design that appeals to their consumers, but also to further develop functional parts that can carry a new design. A design patent is unique than any other artistic expression because the design is very limited. It is based on all the operational and functional components to make up the article of manufacture. Thus, in order to develop a different and attractive design, a company may work harder in making their functional components smaller or shaped differently. As discussed above, a company may work to obtain an edge over another company who also sells high quality products by enhancing their designs. Furthermore, companies can make designs targeted toward a specific audience, resulting in consumers with products that have a more preferable “look”. Therefore the importance provided to designs, not only develops more consistent customers, but also in effect instigates development of more versatile functional parts.

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Therefore, in referring back to the competing interests of designs, it is particularly important for a product to be commercialized properly if it captures a consumer’s attention via its unique design. If all the phones looked alike, a designer may put less effort into giving their product a personality that influences consumer decision to purchase or not purchase a product. A design takes time and distinguished creativity that a company invests in their product is more commercially attractive. For example, Apple claims that the patents that Samsung infringed upon took them years to develop and only took Samsung three months to copy. Due to public’s reaction to design of articles of manufacture, companies put a large investment into it. In order to provide the industry an incentive to implement unique and new designs to our technology, it follows that strong design patent protection meets the interests of not only companies but also consumers. Therefore, it could be said, that even though designs are not a product of function and operational improvements of an article, the design provides a commercial value to the article of manufacture that deserves a valuable type of protection.

Disadvantages for Consumers

Consumers also benefit from a large range of variety. In light of the holding in Egyptian Goddess, the scope for design patent protection has increased. Since the scope of protection has increased, it is harder for competitors to work around the given design. Manufacturers find it more difficult to design around a given design patent by simply changing certain minimal aspects of the claimed design. To overcome a design patent, the differences between the product and the claimed design must be more than insignificant. This limits the amount of competition in the

141 Kugler, supra note 139.
area of technologies. The limited competition causes limited high prices, product selection, and product development.142

First, as discussed above, high prices are a direct result of limited competition. When there are fewer companies creating smart phones, then a company can increase the cost of the product without the pressure of a similar company selling a similar smart phone at a lower price. The large scope of design patent protection causes one company to be in control of one design for the phone. There are limited designs due to the functional components of the utility. The featured design will be under the control of one company. A consumer’s attention may be directed toward a particular design and until another company can come up with an appearance more appealing with a comparable and/or lower price, thus, it will be difficult for other companies to obtain consumers. Therefore, clearly, the less companies that are selling limited number of smart phones the higher the prices will be for a specific design.

Second, product selection will decrease. Already designs for articles of manufacture are very limited in their design process. As discussed above, the design must work with the functionality and utility of the technology in order to appear presentable in essence of the design.143 Even though their sources of inspiration are unlimited, designers recognize that “the ‘degree of freedom’ dictated by a product’s functionality (i.e., the extent to which a designer can modify the aesthetics of a product without interfering with its proper function) might restrict its design.144 Although advancements in technology provide for smaller and more flexible parts in products, there are still many limitations to designers of article design. As a result, the limitations already created by the subject matter of the design and then with the large scope of design patent

143 Id.
144 Mueller, supra note 23, at 436-43.
protection can create a great amount of difficulty for a competitor to commercialize their product.

Lastly, and most importantly, a large gray area for design protection can limit product development. For new companies to compete with large companies, such impediments due to design patent protection can inhibit new upcoming consumer electronic companies to create new products for the benefit of consumers. When there are less companies working to create competing products, research and development slows down and technical innovation for the country becomes restricted. Product development is important for consumers because not only do they get more user-friendly and useful products, but also it grows the economy. More product development in a country directly affects the market of the country for selling their products within their country and to foreign countries where there is an expanding market for new technology.\textsuperscript{145}

\textbf{Conclusion}

Design patents are one of the most dynamic and controversial areas of intellectual property. Design patents are abstract and difficult to understand and therefore tend to always have a gray area as to the scope of its protection. The controversy over design patent protection has become increasingly more influential to the average consumer because of the technology used by every American. The case of \textit{Apple v. Samsung} is a landmark case that has spiked interest in many consumers and patent owners. Currently, Samsung has appealed the case and Americans are eagerly waiting for the outcome of the appeal. The outcome of the appeal will speak to both the mass number of consumers and patent holders. Even though the case is not changing any patent law, the case creates a precedent for today’s technology that might have

\textsuperscript{145} Schwartz, supra note 134.
been unforeseen by the writers of the original design patent laws and courts that ruled on previous infringement cases. *Apple v. Samsung* is a landmark case because it initiates the influence of design patent protection over today’s technology.