

# Design Patent War: Apple versus Samsung

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South Asian Journal of  
Business and Management Cases  
3(2) 221–228

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SAGE Publications

Los Angeles, London,  
New Delhi, Singapore,  
Washington DC

DOI: 10.1177/2277977914548341

<http://bmc.sagepub.com>



## Abstract

High-technology companies that have brought innovation to the market also use their innovation to claim their intellectual property rights around the world. In 2011, Apple Inc. started to claim its design patent over Samsung Electronics Company in the United States (US) court and the disputes then expanded to more than 50 lawsuits in numerous courts around the world, and became a design patent war. The amount of damages in a US verdict was the largest design patent infringement jury award of all time—US\$ 1.05 billion, the amount by which most companies would become bankrupt by a single infringement. A design patent war like Apple versus Samsung lawsuits showed that design patent has seized centre stage of modern battle. In addition, it signified that any company must seriously incorporate design patent issue into its intellectual property portfolio. The dispute also revealed an interesting unclear boundary of design infringement that could impact the level of legal risk for every related industry.

## Keywords

Design patent, intellectual property, legal risk, Apple, Samsung, ornamental design, ordinary observer

## Introduction

The smartphone and tablet industry is driven by the collection of intellectual property rights, which has led to unavoidable lawsuits related to patent, design patent or trademark that span courts and several continents. The most significant incident of this decade has been the various design patent war between Apple Inc. (Apple) and Samsung Electronics Company (Samsung) that took place in 2011, and ever since, expanded to more than 50 lawsuits in numerous courts around the world (see Duncan, 2014, p. 3). Since electronic devices such as smartphones and tablets have changed our everyday lives, the epic battle between these two high-technology titans has captured the attention of world's mainstream press and media from the beginning.

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Narumon Saardchom has developed this case solely for class discussion for programmes in management education. The author does not intend to illustrate either effective or ineffective handling of a managerial or an administrative situation. The case study does not represent or endorse the views of the managements about the issues in the case. The author may have disguised certain names and other identifying information to protect confidentiality where needed. The case has been compiled from secondary sources of information as available in public domain.

‘The jury has reached its verdict’ was pronounced on 24 August 2012. The verdict was bold and decisive. The American jury ruled in favour of Apple and ordered Samsung to pay Apple an amount of US\$ 1,049,343,540,<sup>1</sup> which, if sustained, would represent the largest design patent infringement jury award of all time. Although this judgment was later appealed in the United States (US), the phenomenal damage award could be feverish and caused confusion to all related technology industries around the world.

If Samsung could be penalized for its attempt to create rectangular smartphones or tablets similar to those of Apple, then other companies would be fearful of designing any new rectangular device. If this design patent war could impact how other high-technology companies design their new products, the consumer might have to bear potential unintended consequence of higher prices from limited available choices. This case study is, therefore, aimed to discuss three emerging issues:

1. facts and background necessary to understand this design war;
2. the significance and implication of design patent; and
3. the potential unintended consequence.

## Brief Background

In April 2011, Apple filed its first claim against Samsung in the US District Court for the Northern District of California in San Jose, California. Subsequently, Apple filed similar cases against Samsung in several countries worldwide, most notably in the United Kingdom (UK), Japan and Germany. Apple’s complaint in the US court claimed that prior to the introduction of the iPhone, there were no cell phones that used a display screen that allowed for touch control, referred to as Multi-Touch(R) (multi-touch) interface. Apple further claimed that the iPhone had a ‘distinctive user interface, icons, and eye-catching displays that gave the iPhone an unmistakable look’.<sup>2</sup> According to Apple, all of these features had been combined in an elegant glass and stainless steel case with a distinctive user interface that gave the iPhone an immediately recognizable look. The design and new technological features had been uniquely associated with Apple as its source.<sup>3</sup>

In this lawsuit, Apple alleged that Samsung infringed eight utility patents, seven design patents and six trade dress rights.<sup>4</sup> On the contrary, Samsung counterclaimed that Apple infringed five of Samsung’s utility patents. On 8 February 2012, Apple filed its second claim against Samsung in the US District Court for the Northern District of California and alleged that Samsung infringed upon its several patents; and again, Samsung counterclaimed that Apple infringed its patents too. In this complaint, Apple claimed that Samsung had systematically copied Apple’s innovative technology and products, features and designs.

## Apple versus Samsung Timeline

The battle between Apple and Samsung has been raging noisily for more than four years and is still ongoing. To understand the case better, a timeline of 10 major events that happened in the last four years is listed as follows.

### *April 2011: The First Lawsuit and the Counterclaim*

As a matter of fact, the battle initially started in the end of 2010 when Apple began to claim that Samsung smartphones and tablets infringed on Apple patents. Apple started the game by proposing a licensing deal in which Samsung would pay Apple up to US\$ 30 per smartphone and US\$ 40 per tablet, but Samsung declined the proposal. After the unsuccessful licensing deal, Apple filed the first lawsuit claiming that Samsung infringed its utility patents, design patents and trade dress rights. Samsung hastily counterclaimed over 3G technology patents and expanded the battle internationally by filing claims against Apple in Japan, Germany and South Korea (Duncan, 2014, p. 2).

### *August–September 2011: Apple Launched Missiles*

In addition to filing against Samsung in the US, Apple filed numerous similar lawsuits in several countries. With injunction orders as the most important weapon in intellectual property war, Apple made the full use of these missiles. All kinds of injunction orders available in most courts were applied by Apple, and in some cases Apple succeeded. For example, Apple managed to receive an injunction order from the Court of Dusseldorf, Germany, to ban the sale of Galaxy Tab 10.1 in the European Union (EU), but such order remained valid only for one week when the court later reversed the order. Therefore, Samsung began selling the Galaxy Tab 10.1 in Germany and other countries (see Oliver, 2011).<sup>5</sup> During the same period, the US District Court for the Northern District of California in San Jose declined the request from Apple to pull Samsung's products from the shelves. However, the court ordered Samsung to share samples of offending devices and source code with Apple as part of the evidence-gathering procedure. In return, Samsung requested the court to order Apple to disclose the information about the forthcoming iPhone5 and iPad3, but the court refused this request.

### *February 2012: The Second Lawsuit and the Counterclaim*

Apple filed the second lawsuit against Samsung on 8 February 2012, alleging it of infringing several patents on various products. Similar to the first case, Samsung filed counterclaims against Apple.

### *March–May 2012: Settlement Talks Began*

In the Northern District of California in San Jose, both Apple and Samsung lawyers continuously claimed against each other of violation of court orders and discovery procedures. Judge Lucy H. Koh finally ordered both companies into settlement talks in late May 2012. However, the settlement outcome was not achieved.

### *July 2012: Jury Trial Started*

The American jury trial between Apple and Samsung opened on 22 July 2012. The trial contained testimony by numerous technical and damage evaluation experts, including witnesses who invented the

technology at issue in the case. Both parties submitted copious documents to prove every technical issue of the argument. At the last minute, Apple's lawyer submitted a 75-page list of potential witnesses, but Judge Koh refused to accept the list.

### *August 2012: US\$ 1.05 Billion Victory*

On 24 August 2012, American jury spent only 21 hours in deliberation and returned a verdict largely favourable to Apple, awarding US\$ 1,049,343,540 damages to Apple and zero damages for Samsung's counterclaims. The decision was broadly criticized and raised controversies over the potential unintended consequence on consumers and smartphone industry. More concerns were placed on inadequate qualifications of the jury members for a complex patent case. In this case, both parties had expected that the jury would take a much longer time to conclude the verdict since they were given more than 700 questions by numerous technical experts, including highly technical documents. Critics claimed that the nine jurors might not even have had enough time to read the lengthy jury instructions from Judge Koh (see Vaughan, 2012).

### *October–December 2012: Apple's Bad Time*

In the US, Apple sought numerous injunctions to fight Samsung in both lawsuits filed in June 2011 and February 2012. Most orders were gradually refused by courts and United States Patent and Trademark Office (USPTO). For example, the Court of Appeal lifted an injunction on the US sales of the Samsung Galaxy Nexus and USPTO rejected all claims of Apple '915 pinch-to-zoom patent. Judge Koh also denied Apple's request for a permanent injunction against Samsung.

### *March 2013: Retrial*

In the first lawsuit, Judge Koh found that the jury had applied an 'impermissible legal theory' to calculate Apple's damages. She later ordered a retrial to determine the correct damages and finally invalidated US\$ 450 million awards to Apple (see Niccolai, 2013). New set of jury was appointed and it awarded Apple US\$ 290.5 million in damages, resulting in the reduction of Samsung's penalty from US\$ 1.05 billion to US\$ 929 million.

### *March 2014: Second Lawsuit*

While Samsung filed a formal appeal of the US\$ 929 million judgment on the validity of key Apple patent, the second US trial which Apple sought for roughly US\$ 2.2 billion damages started its proceedings on 31 March 2014. The second trial mostly focused on different patents and dissimilar products than the first trial.

### **May 2014: US\$ 120 Million Victory**

On 2 May 2014, American jury decided in the second case that both companies had infringed some of each other's patents and ordered them to pay damages. It ruled that Samsung violated two Apple design patents, including its popular slide-to-unlock feature on iPhones, and awarded Apple US\$ 119,625,000 damages, which was much smaller than US\$ 2.2 billion Apple had asked for. On the other side, Apple was found to violate one Samsung patent and awarded Samsung US\$ 158,400 in damages.

## **Tactical Considerations for Design Patent**

The design patent in the US is a type of intellectual property right granted to the ornamental design of a functional item. Design patents are therefore considered a type of industrial design right. Ornamental designs of jewellery, smartphone and computer notebook are examples of objects that could claim design patents. It is interesting to note that design patents have always been easy to obtain; indeed, far easier to obtain than a utility patent (Quinn, 2011).

In general, a design patent is obtained for the aesthetically appealing features of a product. In other words, the subject must be a product of aesthetic skill and artistic conception, not functional use. For instance, it would be hard to apply a design patent for a nail or key, since it would usually not have aesthetic appeal.

To qualify for a design patent, the subject must be new in the sense that no identical design exists in the prior art. It must fulfil the ornamental standards and it must be original to the inventor or inventors seeking protection. In addition, design patents cannot be obtained for ornamental features that are not visible when the product is in use (Silverman, 1993).

A design patent protects the appearance, not the mechanical structure. In this regard, it is possible for many different smartphones to receive design protection even though the basic mechanical structure is well known. In addition, design patent protection is limited by the design claim.

In the US, a design patent protects 'any new, original, and ornamental designs that are used for articles of manufacture'.<sup>6</sup> Design patent is obtained by filing an application with the USPTO. After the application is submitted, an examiner evaluates the application and determines if the design is patentable. This evaluation consists of determining ornamentality, novelty and non-obviousness of the claim.

## **Design Patent Infringement**

Design was a main argument in the Apple versus Samsung war. In both lawsuits, Apple accused Samsung that it had systematically copied Apple's innovation and designs. In general, the company sought out a way to protect the design since it had developed a new design.

Under the US Federal Patent Act, if the owner of design patent believes that his patent has been infringed, he may bring an action. In general, design patent gives the owner the right to prevent others from making, using or selling a product that so resembles the patented product that an 'ordinary observer' might purchase the infringing article thinking it was the patented product.

The current design patent infringement test, known as the ‘ordinary observer test’ (Barcena, 2013), was first laid down by the US Supreme Court in 1871 in *Gorham Co. vs White* case involving an ornamental design for silverware handles. In *Gorham*, the court declared that there was infringement if ‘in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other’.<sup>7</sup> Applying the ordinary observer test, the court rejected the notion that design patent infringement should be decided through the eyes of an expert, and rather left the decision to the ‘ordinary observer’.

In addition, *Gorham* rejected a design patent infringement test that required exactitude, and instead opted for a test requiring substantial similarity in appearance (Carani, 2013). It is important to note that to decide the design patent infringement under the US law, the inspection of the accused product from all perspectives set forth in the design is required.

The significant step in deciding a patent infringement claim is to compare the alleged infringing design to see if it is identical or similar to the patented design. This comparison is not made on a side-by-side basis. The ordinary observer test requires a hypothetical ordinary observer who, being aware of the patented design, sees the product alleged to infringe in the first time. The ordinary observer pays as much attention as one would usually use in purchasing such a product. In addition, the comparison must be made between the two articles as they would appear in use (Silverman, 1993).

The standard of infringement includes two stages. One must, first, determine what ornamental features of the patented design are not shown in the prior art and if such features are taken by the product alleged to infringe. If it is none, then there is no infringement. Second, if there was appropriation of such unique features, then a second test is applied. The hypothetical ordinary observer will examine both the similarities and differences between the two products to determine if there is sufficient overall similarity to deceive the ordinary observer. The infringement exists, if there is sufficient overall similarity.

## Observation of Jury’s Verdict

To demonstrate and observe the jury interpretation in the first lawsuit, Figure 1 shows the comparison part of Apple and Samsung alleged products. From left to right, the first column shows images of relevant prior art, the second column shows Apple design patents and the third column shows Samsung products.

Applying the ordinary observer test, the jury decided that the first two rows of Samsung’s Galaxy 10.1 Tab do not infringe Apple’s design (Design Patent No. D504,889). The third row of Samsung’s Galaxy S 4G infringed Apple’s design (Design Patent No. D593,087), but the fourth row of Galaxy Infuse 4G did not infringe Apple’s design (Design Patent No. D593,087).

The verdict has been broadly criticized, especially for the standard of jury’s interpretation and the amount of US\$ 1.05 billion damages. Everyone wanted to understand the exact differences between the various design patents and the accused products. For example, the jury found that the Galaxy S 4G infringed the D593,087 patent, while the Galaxy Infuse 4G did not infringe the same patent. In comparison, there might be some differences at the curvature corner and geometry of the bezel on the Infuse 4G, but it was not clear whether there was any well-defined standard or conclusion. As a result, smartphone designers and high-technology companies could all face unpredictably high level of legal risk.



**Figure 1.** Prior Art, Patented Designs, and Samsung's Products

**Source:** Morgan Smith, *Design patent litigation: Where aesthetics and law intersect*, Cogent Legal blog. Retrieved 9 January 2013, from <http://cogentlegal.com/blog/2013/01/design-patent-litigation/>

## Analysis and Conclusion

Both of the Apple versus Samsung lawsuits were a proof that design patent became a centre of modern battle. This design patent war was a lesson for a company to seriously incorporate design rights into its intellectual property portfolio. Design patent could not be overlooked by any high-technology company to achieve a strong intellectual property portfolio.

Design patent war apparently brought increasing risk to smartphone industry. The unclear boundary of design infringement also caused high level of legal risk to every related industry. The unbelievable amount of damages ruled in favour of Apple could bankrupt any company by a single infringement. This design patent war would change the way a company treats its intellectual property. Every company must review its intellectual property strategies and tactics to remain sustainable in this modern battle.

Intellectual property law experts and competent practitioners have become increasingly important to render decent advice on design patent infringement and understanding of real disputes and legal claims. Apple versus Samsung cases should serve as useful gauges for evaluating the difficult question of how close is too close, in the design patent zone.



## Notes

1. See Apple, Inc. vs Samsung Elecs. Co., No. 11-CV-01846 2012 (N.D. Cal. 8 August 2012).
2. Apple, Inc.'s Complaint sf-2981926, 15 April 2011, p. 1.
3. Ibid., p. 4.
4. Ibid., p. 7.
5. Samsung might claim a victory in the UK since the UK High Court ordered Apple to post public notice that Samsung did not copy the iPad's design. The court ordered Apple to post the notice on Apple's UK website for six months and publish it in several newspapers and magazines as well. See Panzarino (2012).
6. US Code: Title 35-Patents, 35 U.S.C. § 289.
7. Gorham Mfg. Co. vs White, 81 US 511, 528 (1871).

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