

The Apple Patent Fight Between Apple and Samsung: Interviews with Korean and Korean-American Attorneys

Apple and Samsung have been embroiled in litigation over their respective intellectual property for almost ten years, seeking nine figure dollars in damages and injunctions. Environmental pressures from the world of technology contributed to the outcomes and problems in these smartphone patent cases. Smartphones' designs and components allow for frequent litigation over infringement, and these products are constantly evolving.¹ Apple claimed infringement of the "look and feel" of the iPhone and iPad in Samsung's Galaxy S line, and Samsung responded with a countersuit for infringement of wireless networking technology patents.² The main subject of this fight was over their patents protecting components of their smartphones, including design patents. In 2011, Apple first sued Samsung in the Northern District of California and Samsung countersued. The brunt of the arguments centered around Apple's patents. A jury deciding for Apple in 2012 and awarding \$1.049 billion in damages, and Samsung appealed.

In 2012, the U.S. Patent and Trademark Office tentatively invalidated a few of Apple's patents 7,469,381 (Patent '381), 7,844,915 (Patent '915), 7,864,163 (Patent '163). By the end of the 2016, the Supreme Court had taken the case and reversed with a standard to define "article of manufacture." With subsequent trials, and new lawsuits filed, a trial again began in 2014, where the jury found in favor of Apple, awarding Apple almost \$120 million dollars for patent violations. However, the jury also found Apple also infringed Samsung's patents, awarding \$158,400. Samsung appealed to the Federal Circuit, where a panel decided with Samsung and set aside the jury verdict, deciding there was no infringement because the patents on "slide to unlock" features were invalid based on prior art.

An en banc hearing reversed the three judge panel decision and restored the \$120 million award in 2016. Although Samsung appealed this decision to the Supreme Court, the court did not hear the appeal. Overall, the trials between Apple and Samsung have resulted in Apple being awarded settlements over \$500 million dollars.

The Technology

Apple's Patents

Utility Patent '381 protects the iPhone's scroll-back and bounce design when scrolling a document, which works like spring-back behavior when a user reaches the edge of a document. The claims cover when an electronic document reaches the end while translating the electronic document in one direction by touch input, displays an area beyond the edge of the electronic

¹ Ronald A. Cass. *Lessons from Smartphone Wars: Patent Litigants, Patent Quality, and Software*. 16 Minn. J.L. Sci & Tech. 1

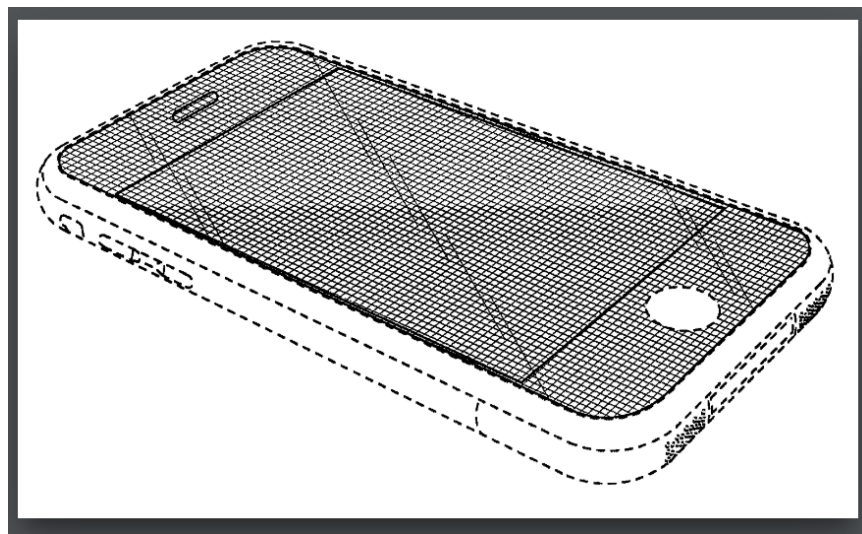
² Jaemin Lee. *A Clash between IT Giants and the Changing Face of International Law: The Samsung vs. Apple Litigation and Its Jurisdictional Implications*. 5 JEAIL 117. Spring 2012.

document, and then translating the electronic document in a second direction when the touch input is released. However, an ex parte examination was requested in May, 2012, with the U.S. Patent and Trademark Office (USPTO)'s first office action finding two cases of prior art against the patent.

Utility Patent '915 covers the aspect known as the "pinch-to-zoom," which covers the ability to distinguish between the scrolling movement of one finger and two-finger gestures like pinch-to-zoom on a touch-screen to activate certain functions. The claim at issue in Patent '915 relates to "determining whether the event object invokes a scroll or gesture operation by distinguishing between a single input point applied to the touch-sensitive display that is interpreted as the scroll operation and two or more input points applied to the touch-sensitive display that are interpreted as the gesture operation." (cite: Patent '915, Claim 1). The USPTO has rejected claims of patent '915 as they were anticipated by previous patents or unpatentable.

Lastly, Utility Patent '163 has been referred to as the "touch-to-zoom" patent because it covers zoom display techniques using gesture input implementation onto an electronic device. This patent claims the display of an electronic document with multiple boxes of content open, with the ability to navigate through the boxes through touch.

_____Apple's design patents cover the following, shown on the diagram below:



(adapted from Figure 1, D618,677)

D618,677 - Electronic Devices (note: pictures might be better here - one phone with the patents labelled?)

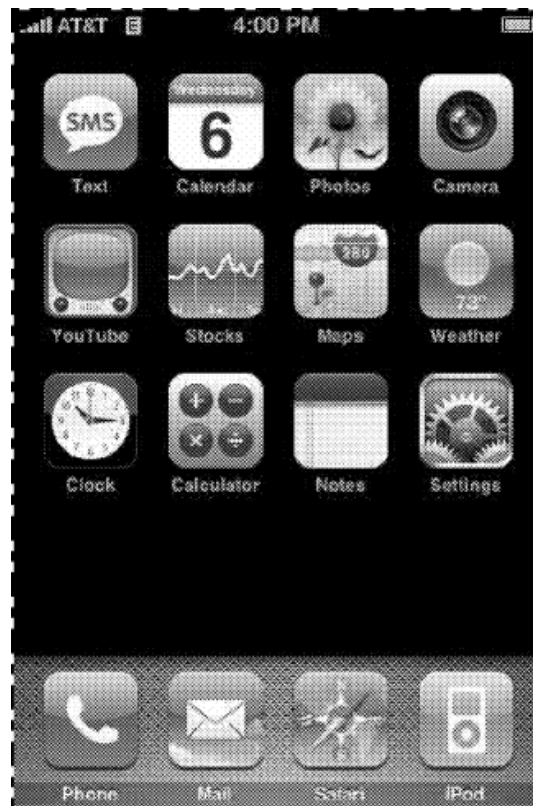
The ornamental design of an electronic device, as shown and described. - the screen

D593,087 - Electronic Devices

The ornamental design of an electronic device, substantially as shown and described. - the outer part

D604,305 - Graphical user interface for a display screen or portion thereof

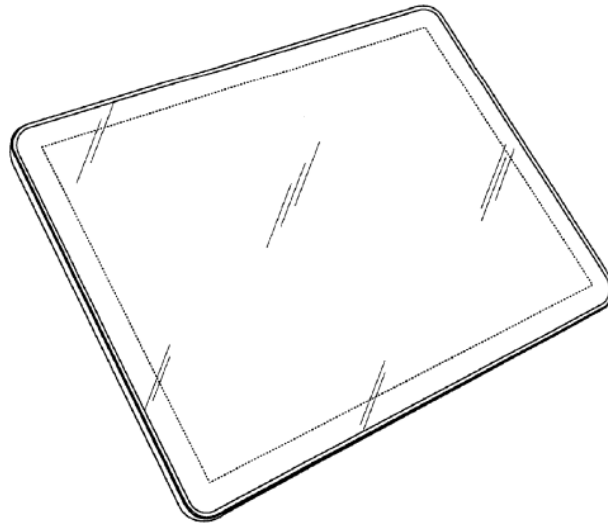
The ornamental design for a graphical user interface for a display screen or portion thereof, as shown and described. - the screen itself



(adapted from Figure 1, D604,305)

D504,889 - Electronic Devices

We claim the ornamental design for an electronic device, substantially as shown and described. - looks like the very exterior (the case)?



(adapted from Figure 1, D504,889)

Design patents under 35 U.S.C. §289 allow for actions involving a low risk and high reward, but this depends on a balance between the limits and the advantages of the design patent. Design patents do not have the same protections as a utility patent, both in scope or in length of time. However, design patents are much less expensive to file than the utility patents and take less time before issuance.³

Samsung's Patents

Some of Samsung's patents were standard essential patents, patent used in a standard. These standards are important in the world of technology, where there many patents, each covering a different piece of, for example here, a phone, which then leads to a difficult patent-licensing problem.⁴

Utility Patent 7,675,941 (Patent '941) is a 3GPP is a standard essential patent, covering communication technology required to comply with the Universal Mobile Telecommunications System (UMTS) standard). Utility Patent 7,447,516 (Patent '516), another standard essential patent, covers radio channels to transmit data using a set amount of power, one not supporting a Hybrid Automatic Retransmission Request (HARQ) and a second that does support the HARQ.

Utility Patent 7,698,711 (Patent '711) covers MP3 playback technology on a mobile device. This patent covers MP3 playback technology on a mobile device. This patent claims that playing music in an MP3 mode in response to a user input with respect to an interface, switching

³Timothy Coughlin. *Apple, Inc. v. Samsung Electronics Co.: Economics of Design Patent Trolling*. 3 Cardozo Arts & Ent. LJ 209.

⁴Jeffrey I.D. Lewis. *WHAT IS "FRAND" ALL ABOUT? THE LICENSING OF PATENTS ESSENTIAL TO AN ACCEPTED STANDARD*

the MP3 mode to a standby mode while playing the music, performing at least one function while playing the music in the standby mode, and displaying an indication that the music is being played.

Utility Patent 7,577,460 (Patent '460) covers a method of transmitting emails with a message or an image to be captured in a camera mode. This patent claims that transmitting a first message in a first email transmission mode, and transmitting a second message and an image selected among images stored in a memory in a second email transmission mode.

Utility Patent 7,456,893 (Patent '893) covers switching between photo and image display modes. When the user switches back to display mode the most recent image viewed before the mode switch is shown. This patent claims that displaying a single image file in a reproduction mode, switching from the reproduction mode to a photographing mode, storing a newly photographed image, switching from the photographing mode to the reproduction mode, and displaying the single image file again.

Two Interviews

_____ We interviewed two attorneys. One is a Korean-American patent attorney, who grew up in Korea, had experience practicing law in Korea, and is currently practicing law in America. We had the opportunity to hear his thoughts on a battle between a large technology company here in the United States and a large technology company in Korea. The next is a Korean attorney interviewed via telephone. He was born and raised in Korea and he is working as a patent attorney in Samsung Electronics. He joined the company after the litigation started, so he was not directly handling with this case.

Interview with an American patent attorney

The Patent Infringement Case

_____ For the first interview, we wanted to focus on his thoughts of why he thought this case came about. When we asked why he thought this patent lawsuit went forward with such rigor, since as mentioned above, the number of infringement opportunities does not equal the number of cases filed. Our interviewee went through the options a company has to protect their products against a newcomer or a competitor in its field, so that the company can protect its market share. To protect the market share, they need to continuously develop the technology. This is even more relevant in a field that is constantly evolving, and competitors' products are similar to the company's products.

Apple and Samsung have a "literal omnipresence" as two digital giants, spanning across borders, viewing the globe as one market.⁵ However, this case is interesting, even more so that

⁵ Jaemin Lee. 124.

Apple and Samsung are very different companies, although they both produce smartphones. He explained that while Apple could be considered an “innovation” company, as its focus was with the design and the user interface, and Samsung could be considered a “manufacture” company. The two companies have different business models. In addition, Apple was reluctant to license its technology, as the company “has a reputation for protecting its patents for its own use and excluding all others.”⁶

Apple was also based in the United States, already familiar with the legal environment, where they already had in-house patent attorneys. Samsung’s patent department formed as a response to these infringement suits. Knowing the legal ins-and-outs of a U.S. based legal system, Apple could file a lawsuit more easily than a foreign company without the same knowledge could respond. Apple also was accustomed to the legal expenses a company would need to expend in the United States. On the other hand, Samsung had a tougher time, with a Korean to English and back to Korean translation.

The U.S. versus the Korean Legal System

Having worked in both countries, we were intrigued by his thoughts on the Korean legal system versus the American legal system. He explained that the system and the legal environment in the United States is different than the general system and legal environment in South Korea.

We also inquired about the jury presence in America. Attorney sometimes like a jury trial and sometime not. Every case is different. Sometimes, it is difficult to make juries to understand the technological background. However, the attorney should have a belief that the jury would like to help him or her on the case. Therefore, in patent litigation, it is really important to draft claims and specification clearly. In apple’s patent, you can easily find what the claims mean. On the other hand, it’s quite difficult to catch the meaning of the claims of Samsung’s patent regardless of technical level or depth of the patent. It should be readable by a lay person. The claim should be described the technology in a correct and concise way. The interviewee showed us the ease with which a person could read a claim on an Apple patent and the technological difficulty in the claims in a Samsung patent.

Although the litigation spanned over nine countries, the most controversial decision was the jury decision awarding Apple \$1.05 billion in damages.⁷ The jury had to consider of about 700 discrete points on a set of 84 separate injury instructions spanning over 109 pages. The same day, a South Korean court also handed down a decision. However the US patent and court system is different from the system put in place in South Korea. In the United States, patent infringement is resolved by the jury, and the same court hears the validity case. South Korea has a bifurcated litigation system, where one system deals with the patent infringement and another

⁶ Melissa Black. *Innovation and Consumers as Casualties of War in Global Technology Patent Battles*. 22 *Transnat’l L. & Contemp. Probs.* 181. Spring, 2013

⁷ Samuel B. Bordick. *Lay Jurors: The True Casualties of the Apple v. Samsung Smartphone Patent Wars?*. 29 *Temp. Int’l & Comp. L.J.* 239. Fall, 2015.

system has the jurisdiction over the invalidation case. In South Korea, invalidation cases are heard by the Patent Court, and infringement cases are heard by a district court.

The Outcome

Although Samsung lost in these cases with high damages, the attorney thought Samsung won too. It won market recognition, coming out of an age when they were really only known globally for their large panel televisions. In response to this suit, Samsung having implemented its own in-house intellectual property team and with extensive experience now in the United States legal system, will now be more prepared for the realities of the United States legal system.

Interview with a Korean patent attorney

The Patent Infringement Case

Apple's strengths and Samsung's strengths are different. When Apple released the iPhone, the its design and GUI (graphical user interface) were very innovative. It's so intuitive that users can easily manipulate their smartphones. In other words, Apple has strengths in software. Samsung, on the other hand, is a manufacturer and has strength in hardware. Samsung may have realized that there is a software vulnerability. What Apple was worried about was that GUI and exterior design is relatively easy to follow compared to hardware technology. Therefore, it has made considerable effort to protect their software. In the UK and Germany, when Samsung launched the products which Apple argued that it is similar with the products of Apple, Apple started to file a lawsuit. However, the court ruling did not get much results, and rather it had to state in the advertisement that the Samsung product did not copy the Apple product. Therefore, I think that I was focused on lawsuits in the home ground, which is one of the biggest market in the world and is familiar in terms of legal environment.

Damages should be based on the whole product? versus based on a percentage, dependent on the infringing portion of the product?

Under the article 289 of the US Patent law, the amount of damages can be calculated based on the infringer's total profit. However, some of the design patents in technology-intensive electronic devices, such as smartphones, where about 250,000 patents have been applied to one product, the infringer has to pay the total in calculating the amount of damages on the basis of profit, the amount of compensation for damages could be overcompensated. I personally think that it could hinder industrial development through innovation which the US patent law has been aimed at.

Does the scientific knowledge of Jury affect the result of a trial?

The Jury Instruction and Verdict Form that were given to the jury after the final argument are very complex and difficult to understand even for the experts. It takes more than two hours to read a 100-page verdict, and the 22-page verdict contains a total of 700 questions. I think that the

role of juries composed of lay person such as electrician, social worker, housewife, and unemployed person is too heavy.

The Outcome

Apple calls Samsung a copycat and it has succeeded to make a perception that Apple is an innovative company, and Samsung is a fast follower. The final settlement is unofficial. I cannot tell the exact amount of compensation, but I think Samsung also got a lot of benefit from the litigation. Samsung was able to increase the brand value, and they gained the image of a competitor to compete with Apple in the Android camp. In addition, the point of view of patents has also changed. Samsung used to concern about the number of patents, but they started to focus on improving the quality of patents after litigation. In the course of the lawsuit, the overall understanding of the practice in the United States has also improved. In fact, after filing a lawsuit, the company created a patent development group in the Telecommunication division to handle the patent issues related to the products manufactured by the division.