The Philosophy Went Wrong; Good Artists Copy, Great Artists Steal: An insight on Patent Issue in the Smartphone Industry

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Abstract

Smartphone Industry experiencing a high increasing return in the short run indicating the fact that in the long run Increasing return to scale holds, but does the strategy of Patent to restrict entry or to cut competition hold?, Or in other words does the strategy of dominant players to cut the benefit of increasing return to new players and maintain its supernormal profits hold? , rather than going into the painstaking way of each and every case of patent issue, our purpose is to develop the story around the real issue and confirm that the patent as a binding and restrictive mechanism will not hold given the case of a prior art.

Keywords: Competition, Patent, Prior art, Platform, Innovation

Introduction

The purpose of this paper is to look at the patent issue in one of the fastest growing technologically competitive industry, which was first revolutionized by Apple Inc. and then later by Google's Android Platform. The credit for the growing competitiveness in this industry goes largely to the Android platform as it opened markets for existing, new, and low cost manufacturers. This area of research is noteworthy, given the conflict between growing competitiveness and patents claim raised by the top players, as it reflects the actors' action in this industry associated with development that can provide a relative advantage for capturing the market share. In this paper we will deal with the patent disputes philosophically, in a historical set up, to look at the incompetency of patent rights, as a competitive strategy in the Smartphone industry. The reason being obvious, 'a smartphone might involve as many as 250,000 active patents largely questionable'[1](2012), and mostly involves cases of a 'prior art'[2] or overlapping rather than originality.

1. https://www.techdirt.com/articles/20121017/10480520734/there-are-250000-active-patents-that-impact-smartphones-represent-ing-one-six-active-patents-today.shtml

[2] "Prior art, in most systems of patent law constitutes all information that has been made available to the public in any form before a given date that might be relevant to a patent's claims of originality. If an invention has been described in the prior art, a patent on that invention is not valid.

Importance of the Study

Smartphone patents licensing and litigation is generally referred to as the Smartphone war. This is associated with Commercial struggle among major players in the Smartphone Industry to holds and maintain market dominance vis-à-vis competitor. The existence of Patents, though, enabled companies with patents right such as Apple Inc., Microsoft, Qualcomm and others to get healthy return on their investment but with availability and accessibility of Open source Android Platform Operating system, the market experienced enormous possibilities, resulting in a clash of interest, leading to large number of patent litigations. In this paper we look at the development of Apple Inc., as one of the best adopters of prior art, once it successfully placed itself in the technology Industry, we then look at its patents claim on various manufacturers, especially Samsung, the main threat to its dominance in the Smartphone industry and whether such claims are justified or not.

Objective of Study

To outline the development of Apple Inc., as an adopter, by using available information of prior art, and whether the Smartphone war in the form of patents licensing and litigation could be seen as a mechanism for competitive strategy in the Smartphone industry or not .

Research Methodology

This study looks at the development of Apple Inc., from 1970's onwards and its adoption of available information to provide products to only high end consumer market. Once the market was created, then the

emergence of other players to capture the remaining market and hold a portion of a lucrative market, is provided with rational argument. In this paper, we have documented the frustration of Late Steve Job, one of co-founders and ex-CEO of Apple Inc., after the emergence of the Android operating system platform and thereby denting the business of Apple Inc., This historical research study, look at the patents issue, to explore the past events in an attempt to interpret the facts and explain the cause of events, and their effect on the present events. Thus, the research used here is a qualitative research technique.

History whispered it All.

The debate in this section follows an unconventional path starting from the 1980's. In the software computer industry, PARC (Palo Alto Research Center Incorporated), formerly 'Xerox PARC'[3] had an unparalleled run of innovation and invention, in the 1970's. Steve Job along with Apple engineers visited Xerox PARC in exchange for a lucrative agreement of selling Apple 100,000 shares for one million dollar, the then hottest tech firm in the U.S. what he saw, expressed his feelings to one of PARC engineer as, "*Why aren't you doing anything with this? This is the*

[3]PARC (Palo Alto Research Center Incorporated), formerly Xerox PARC, is a research and development company, with a distinguished reputation for its contributions to information technology and hardware systems.

greatest thing. This is revolutionary."[4] The user interface that Steve Job saw became part of star desktop. However, Xerox was not able to properly commercialized and profitably exploit PARC's innovations for which it has been severely criticized. In the interim, for the Apple Company's next generation of personal computers, Jobs demanded the team working on it to change their course in line with PARC's innovative development. "The Apple engineers not only copied the original idea of PARC but also invented the pull-down menu, menu bar and the trash can—all features that radically simplified the 'original Xerox PARC idea'[5]."[6] As a result, Apple was able to produce the first commercial successful 'Graphical user

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http://www.newyorker.com/reporting/2011/05/16/110516fa_fact_gladwell?currentPage=all

[5] An engineer at PARC demonstrated the user interface to Steve Job. He moved the cursor across the screen with the aid of a "mouse." Directing a conventional computer, in those days, meant typing in a command on the keyboard. He just clicked on one of the icons on the screen. He opened and closed "windows," deftly moving from one task to another. He wrote on an elegant word-processing program, and exchanged e-mails with other people at PARC, on the world's first Ethernet network.

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http://www.newyorker.com/reporting/2011/05/16/110516fa_fact_gladwell?currentPage=all

interface (GUI)' [7] product, the Macintosh, which was heavily inspired by PARC's innovative progress. This development gave birth to the Mac OS.

In the second half of the 1980's, Apple accused Microsoft of violating its copyright by adopting the 'look and feel' of Macintosh GUI, in spite of licensed agreement for window 1.0. The lawsuit followed because when Microsoft incorporated changes in the upgraded version, Apple found it to be comparable with Macintosh GUI. Apple listed 189 GUI elements as infringed, but the court decided that 179 of these elements had been licensed to Microsoft in the window 1.0 agreements and the remaining ten elements were not copyrightable, either due to lack of originality or limitation in which an idea could be expressed. In the midway, Xerox filed a lawsuit against Apple for copyright infringement to become the primary beneficiary, rather than Apple in the Lawsuit between Apple versus Microsoft. In the lawsuit filed by Xerox, a major issue was the right to the screen displays, the GUI. It was a copyrighted technology that Xerox PARC had developed and merged in "its" star desktop in 1981, which was unlawfully used three years later by Apple's in their Macintosh. However, the timing was not right, so the Xerox case was considered inappropriate, for a variety of legal reasons. At that time, no one disputed that Xerox PARC developed many of the ideas behind such user interfaces. However, the presiding judge dismissed almost all the copyright lawsuit filed by the Xerox PARC against Apple Computer Inc., but the important

[7] Graphical user interface (GUI), typically allows users to interact with electronic devices using images rather than text commands.

question regarding, "how much," the similarity of user interface associated with copyright infringement remained unanswered.

This development not only prevented monopolization by Apple in the modern desktop user interface but also raised serious concerns for the inventor, as it became difficult to distinguish between the inventor and iminventor[8].

"The good artists copy, great artists steal" comment made by Steve job, which he attributed to Picasso, during a 1996 Public Broadcasting Service documentary called "Triumph of the Nerds" to explain how Apple steal all of the best ideas and put them into their products. In his words, "*We have always been shameless about stealing great ideas."*[9]

A decade and half later on March 02, 2010, 'Apple sues HTC over 10 patents and files an ITC complaint against HTC over 10 other patents.'[10] As part of the press release, Steve Jobs said the following:

"We can sit by and watch competitors steal our patented inventions or we can do something about it. We have decided to do

[8] Iminventor is used to denote the combination of improvement and invention on top of the prior art.

[9] http://gizmodo.com/5483914/steve-jobs-1996-good-artists-copy-great-artists-steal

[10] http://www.engadget.com/2010/03/02/apple-vs-htc-a-patent-breakdown/

something about it. We think competition is healthy but competitors should create their own original technology, not steal ours."[11]

'It is one of the most misunderstood and misused creative phrases of all time.'[12] Analyst interpretation determines the side of the story, which is likely to be both sides result in 'an ambiguous generality.'[13] There were several quotes made from

"One of the surest tests (of the superiority or inferiority of a poet) is the way in which a poet borrows. Immature poets imitate; mature poets steal; bad poets deface what they take, and good poets make it into something better, or at least something different. The good poet welds his theft into a whole of feeling, which is unique, utterly different from that from which it is torn; the bad poet throws it into something, which has no cohesion. A good poet will usually borrow from authors remote in time, or alien in language, or diverse in interest."

T.S Eliot – The sacred Wood: Essays on Poetry and Criticism. Philip Massinger (1992).

[11]http://www.feld.com/wp/archives/2010/03/are-apples-competitors-stealing-its-patented-inventions.html

[12] http://arthistory.about.com/b/2009/01/26/good-artists-borrow-great-artists-steal.htm

[13] To see some of interpretation, look at http://gizmodo.com/5483914/steve-jobs-1996-good-artists-copy-great-artists-steal

As far as the Picasso quote was concerned, No authentic source confirmed definite attribution. Steve Job as being a perfectionist doesn't care as long as it works well. This ideology could be attributable to Apple later development as well under him, which turned Apple Computer fortunes to become one of the desirable, luxury consumer brands, around the world.

The Untold Story of Great Product

The Apple Inc. success was attributed to innovative design; a loyal consumer base, eco-system development around its Platform and well executed marketing strategies. Very few People know that the first-generation iPhone looks were comparable to LG KE850 Prada which was announced on December 12, 2006 much before iPhone 2G on January 9, 2007. In 2007, LG Prada won five different awards for the best design, so in terms of innovative design Apple Inc., authority are somewhat questionable. To further elaborate, consider the development of the iPhone, which began in 2004 and employed about 1,000 Apple staff to develop "Project Purple."[14] The first rule of Project Purple was that employees working on it do not talk about it. It was also the second rule. This shows the secretiveness of this project, so there is no question of copying the idea by South Korea based LG Electronics. Also, the KE850 Prada got a 2007 international product design award, where entries had

[14]Dan Rowinski (07-08-2012). "4 Real Secrets We've Learned So Far About Apple". Readwriteweb.com

to be shipped by September 2006. This clearly shows Apple's inability to produce any such design as represented by earlier iPhone.

Given the development in the Smartphone's history in addition to complementary technology history, Apple Inc. announced iPhone 2G on 7 January, 2007, the first multi-touch Smartphone, capable of handling all operations (first use in 'Mitsubishi DiamondTouch'[15], 2001). It also includes 'accelerometer sensor'[16] (first use in Nokia E90 communicator) and 'proximity Sensor'[17]. The idea of introducing the multi touch product was not unique. Microsoft Pixel Sense, which started development in 2001 also supported multi touch and was launched on 29 May 2007. Even the world's first commercial multi touch product could not be attributed to Apple iPhone. In fact in 2004, a French firm called Jazz mutant unveiled the Lemur, which serves as a controller for music devices. This turned out to be the first commercial multi touch device. Thus, the key development for multi touch devices started evolving for commercial launch around 2000. This was remarkably different from Xerox GUI development, which was independent, a rare case of originality and not of a prior art.

[15] The DiamondTouch table is a multi-touch, interactive PC interface product from Circle Twelve Inc

[16] The accelerometer is a built-in electronic component that measures tilt and motion. It is also capable of detecting rotation and motion gestures such as swinging or shaking.

[17] A proximity sensor is a sensor able to detect the presence of nearby objects without any physical contact.

One of the key features of the iPhone was its swiping gestures, which supported 'slide to unlock'. However this feature was a part of 'Neonode N1m' almost alike to the one which made the iPhone famous. Also, one of the reasons for which Apple's iPhone platform turned out to be ahead of potential competitor at that time was the content ecosystem that it offered. However almost 'a decade earlier Japanese telecommunication players pioneered a dynamic, multibillion dollar content ecosystem'[18], but they were not able to replicate the same success outside Japan, attributed as "Galapagos Effect."[19] Therefore, as a part of innovative technology industry, Apple drew together, a number of innovations already developed separately; touch screen Smartphones, capacitive touch screens, sophisticated multitouch user interfaces and so on, and combined them into a great product larger than the sum of its parts. 'This process of merging and the purifying of former innovations is the rule, not the exception, in technologically innovative industries. Android is basically the latest example of the process.'[20]

[18] http://brie.berkeley.edu/publications/wp199.pdf

[19] The "Galapagos Effect", is used to describe Japan's unique culture of technology that has not expanded beyond Japan's borders, in the same way that the Galapagos Islands exemplify unique evolutionary development in nature. Source : http://accjjournal.com/the-galapagos-effect/

[20]http://arstechnica.com/tech-policy/2012/02/if-android-is-a-stolen-product-then-so-was-the-iphone/2/

A Brief Period of Ersatz[21]

The influence of Xerox Parc GUI, on the first Mac OS was well known. As a broad-spectrum too, the path breaking development affects the behavior of later development of competitive players. In the Smartphone industry, such influences led to maturity of the market and expansion of choices. The trade-off exists, in terms of, comparing these benefits with the cost of invention. However, most of the development in the Smartphone industry is a case of prior arts though contested due to overlapping aspect, especially in the software technology.

The Japanese content ecosystem success, commercial feasibility of multi touch devices, swiping gesture feature, iconic design of LG KE850 Prada, touch screen phone and so on, all of these are influential development. It would have been practically impossible for the iPhone development team to come up with a device by ignoring all such advances. Just as iPhone was influenced, the progressive features of it were likely to have swayed Google Android's development in the initial phase. Apple sued HTC and Samsung for such comparability, 'since Android was an open source OS so it was hard to establish a direct benefit to Google.'[22]

[21] The word ersatz means a product has being made or used as an alternative usually an inferior one for something else. The word also means an entity is created in imitation of some natural or legitimate product.

[22] It's easier to make handset manufacturer liable, who directly generate revenue and profit from Android OS, than Google, which gives the OS for free under

If we look at the influential role of wireless carriers in the U.S market which compel the manufacturer to tailor the devices as instructed, then the Apple exclusive launch of first iPhone with AT&T might have influenced other carriers to tailor the earlier prototype of Android's devices to compete. This had led to some of the disputes from the product platform perspective. For instance, the resemblance of Samsung Galaxy S series, the first two, apart from other models, which were also a subject of litigation, in terms of design and features could be attributed to the influence of iPhone's advanced features, as well as to meet demand of carrier providers along such line. The launched of iOS 7, resembled features comparable to Window 8 and Android's OS (mainly 4.0 Ice-cream Sandwich) along with a user interface additions by manufacturer like Samsung. 'Either'[23], this can be due to limitation in which an idea can be expressed, or the influence of the advances in technology or software of a competitor in this new competitive set up. This query is better left unanswered and I leave it for the reader to decide.

The Endless Possibility

The patent issue is not only complicated because of overlapping claims but also so of the broadness of 'prior art' recognition in the litigation. Even Microsoft, which is a multinational software corporation, cannot avoid patent litigation. To avoid patent infringement is practically

licensable agreement and only indirectly creates revenue through mobile advertising and services.

[23] In this case, exclusive dis-junction is use.

impossible, partly because of its size and partly because there is no standard of the jargon that is being used. In addition, 'it is difficult to understand the patent applicability with respect to a specific technology.'[24] This opens up endless possibility, 'a "bubble" around Smartphone patents'[25] combined with the ridiculous number of patents. It's estimated that 250,000 patents, affect Smartphones. As a competitive strategy, adopting patents as an instrument to compete requires a large number of patent litigations, country specific, large resource are required too and opens up the possibility of counter patent litigation. As a hot lucrative market, the number of patent litigations has increased enormously since 2010, underlining the emergence of competition.

The Just Outcome of Patent Right

In this paper we explore the difficulty associated with using patent rights as a form of strategy due to overlapping claims in addition to cases of prior arts. This is not to establish that patent right are useless. Microsoft was able to convince major producer of Android's base OS devices like HTC and Samsung apart from '18 others'[26] to enter into contract, in spite

[24]http://www.crn.com/news/networking/48800085/world-wide-web-inventor-warns-of-patent-licensing-royalty-threat.htm

[25]http://www.techdirt.com/blog/innovation/articles/20121017/10480520734/there-are-250000-active-patents-that-impact-smartphones-representing-one-six-active-patents-today.shtml

[26] http://www.fosspatents.com/2013/04/just-like-one-week-ago-when-foxconn.html

of Google's invalidating such claim as "bogus patents."[27] Interestingly, 'HTC also entered into contract with Apple Inc., for licensing'[28]. 'Microsoft and Apple Inc., also have contracts to prosper without affecting each other's with patent litigations'[29]. Several other players are also involved in patent licensing. If two or more players are involved in licensing each other, it is termed as cross licensing. The idea of cross licensing is to protect innovator incentive that comes from patent infringement and at the same time optimizing consumer's choices. But the hindsight reveals that the cross licensing involve 'complex set up of agreement or demands'[30] from directly involved players such as Apple Inc., in the

[27]http://arstechnica.com/information-technology/2011/10/microsoft-collects-license-fees-on-50-of-android-devices-tells-google-to-wake-up/

[28]http://www.phonearena.com/news/Apple-and-HTC-reach-10-year-licensing-agreement-deal-will-settle-all-lawsuits-between-the-two_id36477

[29]http://www.telegraph.co.uk/technology/apple/9474162/Apple-reveals-secret-patent-deal-with-Microsoft-in-Samsung-trial.html

[30] In an October 2010 document titled "Samsung-Apple Licensing Discussion." Apple's document outlines a licensing cost of $ 30 per Samsung handset and $ 40 per tablet for all Samsung devices running Symbian, Bada, Window mobile and Android. Considering, the range of devices manufactured by Samsung this would translate into $ 4 to $ 15 per devices. The documents also mention an additional 20 per cent discount if Samsung agreed to cross license its patents. In addition, another "level of discount" would be provided if Samsung stop using Apple's most proprietary features, which were not defined in the documents. This shows the complexity of agreement that Apple wanted Samsung to enter.

Smartphone Industry. In fact, Apple Inc., was willing to license only "lower level patents" to Samsung, given its key role as supplier because it doesn't want to repeat the mistake that it had made in the past, by entering into licensed agreement with Microsoft for Window 1.0. As for indirectly involve players such as Microsoft, holding vast patent portfolio reflects decades of its investment, also got benefitted from Android platform, 'estimated to be $ 5 per Android device'[31] in 2010-2011. It was like an icing on a cake in the Smartphone industry for Microsoft at that time, given that its Window Platform was not doing well compared to Android Platform. In fact, in 2011 Microsoft reportedly earned more from Android than it did from its Window Platform. As, all the major players of the product platform category had licensing agreements with Microsoft except Motorola, a sustained source of revenue is guarantee to Microsoft.

The outcome of Patent litigation is very slow as compared to the fast evolving nature of the Smartphone industry. Since 22nd of October 2009, Nokia sued Apple, Apple counter sued Nokia, Apple sued HTC, HTC counter sued Apple, Motorola sued Microsoft, Motorola sued Apple, Apple counter sued Motorola, Microsoft sued Barnes & Noble, Apple sued Samsung, and Samsung sued Apple and so on. The outcome is that the number of litigation increased significantly and they are not over, as

source:http://www.macobserver.com/tmo/article/new_court_docs_reveal_apples_patent_licensing_royalty_demands

[31] HTC is believed to be paying Microsoft $5 per device based on 2010 license deal.Source: http://www.businessinsider.com/microsoft-barnes-and-noble-partnership-is-a-crummy-deal-for-the-mobile-industry-2012-4#ixzz2WzJQVEfy

numerous litigations still continues .For major players, for instance Microsoft, Apple Inc., patent is not only protecting their patented innovations legitimacy or illegitimacy, but also forms a part of their source of revenue. This is true for emerging players too like Samsung, but 'the historical positioning tilt favoritism towards Apple Inc., and Microsoft'[32]. However, given the case of prior art or over lapping aspects, the Smartphone war with respect to patents claim hardly affect the competition in the Smartphone Industry and there is no one way that an idea can be represented, possibilities are many. So, whatever is the claim and documentation provided in the court, the end result in almost all cases provide triumph for the adopters with some cost but given the nature of increasing return along with market expansion in the Smartphone Industry, this little cost is negligible and therefore cannot be used as a strategy to limit competition.

[32] The main determinant of favoritism was players positioning shamelessly by copying, as Apple does by copying Xerox GUI and Microsoft and Intel done with IBM. "The documentary on the history of Apple and Microsoft shows it was all about copying, not patents; at one point, Larry Ellison jokes about how IBM stupidly ceded the chip market to Intel and the DOS/application market to Microsoft when it could have owned it all."

Larry Ellison (born August 17, 1944) is an American entrepreneur and the co-founder and CEO of Oracle Corporation, a major enterprise software.

Source:https://www.techdirt.com/blog/innovation/articles/20130409/09212322633/documentary-history-apple-microsoft-show-it-was-all-about-copying-not-patents.shtml

References

Cromar, S. (2010), *Smartphones in the US: market analysis*. Retrieved fromwww.ideals.illinois.edu/bitstream/handle/2142/18484/Cromar,%20Scott%20-20U.S.%20Smartphone%20Market%20Report.pdf

Gawer. A. (2009), *Platforms, markets and innovation*. Cheltenham: Edward Elgar.

George, K. D., Joll, C., & Lynk, E. L. (1992). *Industrial organisation: competition, growth, and structural change.* Psychology Press.

Hilkert, D., Benlian, A., & Hess, T. (2011). T*he openness of smartphone software platforms-A framework and preliminary empirical findings from the developers' perspective*. In GI-Jahrestagung (p. 422).

Husso, M. (2011). *Analysis of Competition in the Mobile Phone Markets of the United States and Europe*. Master's thesis, Aalto University School of Economics.

Karali, E. (2011). *Strategic patenting in Product-Platform industries: About 'Mad Dogs' that fight to become the leader*. Bachelor Thesis, Erasmus Universiteit Rotterdam.

Parker, G., & Van Alstyne, M. W. (2009). Six challenges in platform licensing and open innovation. *Communications & strategies*, (74), 17.

Parker, G., & Van Alstyne, M. W. (2010). I*nnovation openness and platform control*. Mimeo: MIT Working Paper Series.

Santos Mara, F. R. (2012). *Leader in the mobile Smartphone market*. Master's Thesis in International Business, Turku School of Economics.

Shaw, S. K. (2013). *Competitive Strategy in the Smartphone Industry: A Broad Review*. M.phil thesis, CESP, JNU, Delhi-110067.

Tee, R., & Gawer, A. (2009). Industry architecture as a determinant of successful platform strategies: A case study of the i-mode mobile Internet service. *European Management Review, 6*(4), 217-232.