A Treaty of Versailles - How Microsoft Wants to, and How They Could, End the Patent War

Andrew Pierz

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A Treaty of Versailles: How Microsoft Wants to, and How They Could, End the Smartphone Patent War

Andrew Pierz†

If people had understood how patents would be granted when most of today’s ideas were invented, and had taken out patents, the industry would be at a complete standstill today. I feel certain that some large company will patent some obvious thing related to interface, object orientation, algorithm, application extension or other crucial technique...The solution to this is patent exchanges with large companies and patenting as much as we can.

-Bill Gates, Former CEO of Microsoft, 1991

Android has a patent fee. It's not like Android's free. You do have to license patents. HTC’s signed a license with us and you’re going to see license fees clearly for Android as well as for Windows.

-Steve Ballmer, CEO of Microsoft, 2010

Introduction

The sale of smart phones has exploded in recent years and continues to grow. 2010 saw 270 million smart phones shipped worldwide, in 2011 this number grew to 452 million and sales estimates for the 2012 fiscal year are expected to near 614 million units. The financial stakes are incredibly high; Apple’s iPhone now accounts for half of its $25 billion revenue and Samsung posted record profits of $4.5 billion in 2011 with its smart phone division now its biggest earnings generator. With such high financial stakes, many companies have taken to patent litigation in order to ensure their market share and hinder their competition. Companies as diverse Amazon, Microsoft, Qualcomm, Apple, Oracle and many others are all involved in a complicated web of international patent litigation over smartphones and other mobile products.

The technology journalism sphere has dubbed this onslaught of litigation the Patent World War.

† Bachelors from DePaul University. JD from Santa Clara University School of Law (Expected 2013). This comment won the Gold Award in the Santa Clara Computer and High Technology Law Journal student comment competition
In 2007, Google announced the release of Android, an open source operating system freely usable by any smartphone vendor. Android powered handsets now account for about 53% of the U.S. smartphone market share. Because Android is distributed freely, Google does not profit from phone sales directly. Instead, Google generates revenue from Android through sales in the Android Market online store, and from the increase in internet browsing on smartphones which, in turn, increases Google’s online advertising revenue. Google’s decision to license Android freely, rather than manufacture and sell phones themselves, has provided some insulation for Google from patent litigation, but the phone manufacturers who have adopted the Android platform have not been so lucky. The three largest Android phone manufacturers, HTC, Samsung and Motorola Mobility, have all faced multiple patent suits as a result of adopting Android as the operating system for their handsets. This litigation has had a significant impact, with an estimated cost of $83 billion in legal costs, lost share value and lost innovation across the industry. These costs are inevitably passed on to consumers through higher prices for products and reduced research and development.

Microsoft has been particularly aggressive in this regard and has forced Samsung and HTC into lucrative licensing deals and is currently in the process of suing Motorola Mobility. These licensing deals generate more revenue for Microsoft than the entirety of its own mobile software division and, due to a recent deal with LG, 70% of all Android devices in the US are being imported and sold under a license from Microsoft.

Two strategies have emerged to defend Android from Microsoft’s tactics. Barnes & Noble (B&N), makers of the Android powered Nook tablet have decided to defend themselves in court by arguing that Microsoft’s patents are invalid and that their tactics constitute misuse. Google, on the other hand, recently announced its intention to purchase Motorola Mobility
(with its extensive patent portfolio) for $12.5 billion dollars, which as of this writing has received the requisite shareholder approval,\(^\text{15}\) with the intention of licensing Motorola’s mobile technology patent portfolio to Android partners at little or no cost to give them leverage in patent licensing negotiations and make them less appealing targets for patent infringement litigation by giving them a stronger ability to counter-sue.\(^\text{16}\)

This comment will analyze Microsoft’s patent licensing strategy by looking at the deals they have structured with HTC and Samsung and argue for why they agreed to Microsoft’s terms. Additionally, it will investigate Microsoft’s ongoing litigation with B&N, evaluate the effectiveness of Google’s plan to use Motorola’s patent portfolio to defend its partners from litigation and compare it to B&N’s litigation strategy to determine which tactic, if any, will be more effective. Finally, it will advocate for an alternative strategy for Microsoft which could bring them greater long term success and good will among their consumers and the market place as a whole.

I. Android and Windows Phone

Before analyzing the litigation and licensing deals between Microsoft and other companies, it would be instructive to see exactly what is being contested. Development of Android began in 2003, when Andy Rubin, one of the chief architects of the popular Sidekick phone, left Danger, Inc. to start Android, Inc and develop an open source operating system for mobile phones.\(^\text{17}\) The Android operating system is based off of the open source Linux operating system kernel. The company was purchased by Google in 2005 with the first release of the Android OS taking place in 2007. Android conforms to the Open Source Society’s definition\(^\text{18}\) and allows for anyone to use Android software without having to pay a licensing fee to Google.
The Open Handset Alliance, a group of companies which use Android and contribute to its development, now has over eighty members including HTC, Samsung and Motorola Mobility. Android phones currently makeup 53% of the US smartphone market.

Conversely, Microsoft’s mobile software, Windows Phone, is closed source and requires a licensing fee to be paid to Microsoft for every device sold which uses the Windows Phone operating system; the fee is currently around $15.00 per device. Current manufacturers of Windows Phone devices include Nokia, Samsung and HTC. Windows Phone devices make up about 5.2% of the US smartphone market.

II. Microsoft’s License Agreements with HTC and Samsung

One of Microsoft’s first major successes in implanting their patent licensing strategy was the licensing agreement reached with HTC in April of 2010 which has served as the blueprint for most of Microsoft’s smartphone licensing deals. HTC is a Taiwanese company known for its manufacturing of mobile devices. HTC was one of the earliest android partners and was the first company to release an Android phone, the G1 in 2008. HTC was also one of the first companies to produce devices running Microsoft’s Windows Phone and Microsoft has acknowledged a long history of collaboration with the Taiwanese company. This relationship is likely why Microsoft chose not to initiate legal proceedings and instead decided to first attempt independent negotiation.

These efforts were ultimately successful and Microsoft was able to negotiate a $5.00 royalty for every Android phone sold by HTC in the US. Financial analysts have calculated that Microsoft licenses its Windows Phone software for $15.00 per license. With Microsoft reporting sales of two million Windows Phone licenses, Microsoft’s revenues for their own
software is probably around $30 million to date. HTC, however, reported sales of 12 million Android devices in the second quarter of 2011 alone. At a royalty of $5.00 per phone, Microsoft made $60 million off of HTC in the second quarter; a figure that eclipses their Windows Phone revenues by 100%. The deal has thus proven hugely profitable for Microsoft, and has provided a template for later deals with Android partners.

Analysts have pegged the profit margins of Android devices to be quite slim, in the neighborhood of 10-15% or $50.00 per device, so why would HTC agree to a deal that cannibalizes its most profitable line of products without first attempting to contest it court? Microsoft’s legal team was quick to announce that the purpose of the deal was to square away any infringement claims Microsoft might have against HTC, but HTC likely had more than their relationship with Microsoft in mind when they agreed to ink the deal.

Before HTC’s agreement with Microsoft was announced, Apple, Inc. had filed a complaint with the United Stated International Trade Commission and in the District Court of Delaware. Where Microsoft has sought to use the threat of patent litigation in order to force license agreements and generate revenues, Apple, Inc. has been far more aggressive in their patent litigation by attempting to receive damages through the Federal courts and ban the importation of patent-infringing Android phones through USITC rulings. In contrast to Microsoft, who has patent licensing agreements with six hundred companies, Apple, Inc. has no licensing agreements with Android manufacturers and is not likely to offer one any time soon.

Apple does not see Android as a competitor or potential source of revenue; it sees it as an illegal attempt by competitors to profit by infringing on twenty of its iPhone patents. Then Apple CEO Steve Jobs described the lawsuit with HTC in no uncertain terms, stating, “
Our lawsuit is saying, ‘Google you fucking ripped off the iPhone, wholesale ripped us off.’ Grand theft. I will spend my last dying breath if I need to, and I will spend every penny of Apple’s $40 billion in the bank to right this wrong. I’m going to destroy Android, because it is a stolen product. I’m willing to go to thermonuclear war on this. They are scared to death, because they know they are guilty.33

Thus when HTC was approached by Microsoft, they were already engaged on another front with an adversary who had no interest in a quick settlement or reaching an amicable licensing deal. HTC was ultimately unsuccessful in its attempts to defend against Apple at the ITC and was found to have infringed on Apple’s patent #5,946,647.34 This resulted in HTC having to remove user interface features from their phones before they could resume importing their devices to the US, an effort which cost them time and money and reduced the appeal of their device.35

Apples #5,946,647 patent only covered a small software feature in HTC’s device, for which HTC was able to create a viable work around to avoid infringement and resume importation.36 Microsoft, however holds US patent #7,545,389, a broad method for encoding text to appear on screens.37 This patent is far more central to HTC’s phones, as without the ability to display readable text on screens HTC would likely be unable to sell any products, and it is unlikely they would be able to create a non-infringing method independently in time to maintain market share and profitability.

Thus, HTC represented a perfect opportunity for Microsoft to negotiate a favorable license deal. Faced with a strong likelihood of an (ultimately successful) importation injunction from Apple, Inc. and a potential patent suit by Microsoft which they would not have been able to successfully defend against litigation nor create a viable alternative, HTC probably felt they had little choice but to accept Microsoft’s terms. It now appears HTC may also have been offered an
“early-adopter” discount; since agreeing to a $5.00 royalty with HTC, Microsoft has consistently sought royalties with other manufacturers in the ten to fifteen dollar range.

The HTC deal has proven very lucrative for Microsoft, thus it is no surprise that they have attempted to reach a similar deal with the largest manufacturer of Android phones, Samsung. Samsung too has been embroiled in numerous suits with Apple, Inc. around the globe, including getting some of Samsung’s Android products banned in Germany, with litigation currently proceeding in Australia, Japan and the United States. Unlike the relatively new HTC, Samsung is an established firm with a deep patent portfolio, however, most of these patents relate to factory processes for manufacturing components like microprocessors and consumer electronics such as televisions and monitors. With the exception of computer keyboards, mice and the now abandoned Zune product line, Microsoft has avoided manufacturing operations and selling physical products and concentrated on selling and licensing software. This means Samsung’s wide range of patents would likely provided them with little leverage against Microsoft in the event of a patent suit. Thus, to Microsoft, Samsung looked to be in a similarly vulnerable position as HTC, and ripe for accepting a deal favorable Microsoft.

In September of 2011, Samsung agreed to a per-device licensing agreement with Microsoft. The terms of the deal were never made public, but Microsoft was reportedly asking for $15.00 per device, while Samsung was willing to settle for $10.00, putting the likely final royalty somewhere between those to figures. With Samsung selling nearly 70 million devices in the second quarter of 2011, Microsoft’s potential revenues from this agreement stand to dwarf the revenues from the sales of Windows Phone licenses.
Thus, Microsoft has developed a highly effective strategy for attacking Android through litigation: avoid suing Google directly, target Android manufacturers with weaker software patent portfolios and use the threat of potential high-cost litigation to force a lucrative, per-device royalty deal that ensures Microsoft profits even if their own mobile offerings fail to capture major market share. Nearly two years have passed since Microsoft’s first agreement with HTC and, as the recent deal with LG shows, Microsoft boasts an unbeaten track record in attacking Android and is showing no signs of slowing down. However, not all companies are so willing to readily accede to Microsoft’s terms.

III. Microsoft Corporation v. Barnes & Noble, Inc.

Barnes & Noble is highly motivated to keep its line of Android-powered Nook products profitable. Even as their biggest brick-and-mortar competitor, Borders, was forced to close many of its locations, B&N have maintained profitability and growth with sales of Nook products and eBooks accounting for about 20% of B&N’s total revenues. The profit margins of the Nook are unknown, but similar e-readers from competitors like Amazon are sold for a small loss with the expectation that the loss will be recouped when the customer uses the device to purchase ebooks which have a much lower cost to produce. Thus, a per-device licensing fee offered by Microsoft would severely cut into what is an already thin margin of profit.

Unlike Microsoft’s negotiations with HTC and Samsung, Microsoft was unable to reach a deal with B&N and launched suit against them in the Western District Court of Washington. Microsoft also simultaneously filed a complaint with the ITC which mirrors their federal claim which now alleges multiple claims of infringement on four of Microsoft’s patents. This was shortly followed by a letter to B&N offering them a per-device licensing deal which B&N
rejected, claiming that the royalty fees demand to license patents from Microsoft were greater than that of a license for Microsoft’s own software. The claim not only attacks B&N, but also names the manufacturers of the Nook devices, Foxconn and Inventec, as defendants. This is particularly significant as Foxconn and Inventec not only manufacture Android devices for B&N, but also make devices for Acer, Asus, Samsung and SonyEricsson. A favorable ITC ruling in this case could ripple outwards and prevent the importation of Android devices from these other companies and give Microsoft a significant victory over Google in the smartphone market. B&N are the first seller of Android devices to defend against Microsoft’s patent claims in court, rather than in closed-door negotiating sessions. Thus, one can look at the court filings to get an insight into Microsoft’s overall strategy for litigating against Android, the patents they are likely using as leverage in their negotiations and B&N’s strategy for defending against Microsoft’s patent claims.

Barnes & Noble are new players in the world of consumer electronics, entering the field in 2009 with the release of the first Nook, a device for reading e-books and powered by Android software. As such their patent portfolio pales in comparison to established giants like Microsoft, and holds only three patents, all of which are related to physical accessories to tablet and reader devices. Without a deep portfolio of patents to provide leverage in settlement negotiations and Microsoft’s nearly bottomless well of software patents to draw from, it is unlikely B&N will find a favorable conclusion by settlement to end its litigation with Microsoft.

Unfortunately, Microsoft has also chosen well in regards to B&N’s co-defendants, Foxconn and Inventec. In addition to the afore mentioned advantaged of getting an importation injunction against two major manufacturers of Android devices sold in the United States, Foxconn and Inventec are also unlikely to bring much to the suit in terms of patent leverage.
Foxconn has 1086 patents registered with the US Patent Office, but nearly all of these relate to manufacturing processes or minor electrical parts like #8,083,480 for computer cooling fans\textsuperscript{51} and #8,052,301, one of several for LED lamps.\textsuperscript{52} Inventec has a similar portfolio of 996 US patents including assembled fan frames and several for computer hard drive configurations.\textsuperscript{53} While these might provide protection from other hardware manufacturers, Microsoft has largely avoided the manufacturing market and, as with Samsung, will not provide much in the way of cross-licensing opportunities that might net the defendants favorable terms.

Without leverage to reach a favorable settlement B&N must look to other legal strategies, and an examination of B&N’s court filings shows they intend to assert several affirmative defenses, including patent invalidity and patent misuse. This comment will now assess these defenses as they relate to Microsoft’s patent infringement claims to get a sense of B&N’s, and other Android manufacturers, possible success in a direct challenge against Microsoft.

A. Patent Invalidity

A letter written to the Department of Justice in July of 2011 shows that B&N intend to assert a defense of invalidity based on anticipation against Microsoft’s allegedly infringed patents:  ‘372, 5,889,522 (‘522), 6,957,233 (‘233) and 6,891,551 (‘551).\textsuperscript{54} 35 U.S.C. § 282 allows a defendant to avoid liability by showing an allegedly infringed patent is invalid by asserting an affirmative defense of patent invalidity by anticipation.\textsuperscript{55} “Anticipation” is a strictly technical defense, and unless all of the same elements are found in exactly the same situation and united in the same way to perform identical function in a prior pleaded patent, there is no anticipation.\textsuperscript{56} For example, a defendant asserted that a patent for a mortar compound, composed of methyl cellulose, sand, limestone and water, was invalid because an earlier patent used these
same materials and constituted prior art. However, even though the earlier patent did describe a mortar compound containing these materials the court ruled that because the earlier patent also suggested the inclusion of chalk or saw dust, this prior patent did not meet the anticipation doctrines strict standards. In contrast, the Fifth Circuit Court in *Fairchild* that a patent for using high pressure water spray to clean buildings was anticipated by prior art patents for substantially similar systems to remove bark from trees and to clean steel sheeting, but could also be used for high-pressure cleaning generally.

Here, Microsoft’s ‘372 patent is invalid as anticipated. The patent describes a method for retrieving electronic documents, such as webpages. B&N are claiming that the browser Netscape Navigator 2.0b3 anticipates Microsoft’s ‘372 patent. The ‘372 patent itself declares that an earlier version of Netscape Navigator would meet all the limits of the patents claim, except that it “requests the background image and waits for the background image to arrive before displaying” the document. However, the release notes to version 2.0b3 of Navigator, available before the ‘372 patent was filed, show that this version had been changed to load the text first, and then redraw the webpage after the background image had loaded, exactly as described by the ‘372 patent. Thus, B&N will likely be able to successfully assert of defense of anticipation against the ‘372 patent.

Similarly, B&N have also found prior art for the ‘522 patent. The ‘522 describes a method for having different applications having a similar look and feel to that of the operating system. However, a similar method is found in IBM’s user guide to their OS/2 operating system. As this guide was published in 1992, seven years before Microsoft was granted its patent, it meets to standards of prior art under 35 U.S. C Section 102(b).
Microsoft is also claiming infringement of their ‘551 patent for electronic selection with handles, a method for making ‘handles’ that appear on the sides and corners of an image on a computer screen when it has been selected which can then be dragged to change the size of the picture or shape. This patent however, will probably found as anticipated by US patent 6,151,426, which was granted in 2000 (compared to Microsoft’s 2005 grant for ‘551) and describes a method for selection and resizing tools which appear and disappear automatically when the image is selected.

Microsoft’s final remaining patent claims stem from their ‘233 patent. This patent is for a method and apparatus for capturing and rendering annotations for non-modifiable electronic content, a technical way of saying it allows for a user to add notes and comments to computer documents which are not directly editable. However, Adobe’s Acrobat software, released in 1997 included this feature and predates the ‘233 patent by eight years.

Thus, B&N have valid prior art examples for all of Microsoft’s patent infringement claims and stand a good chance of succeeding against Microsoft in litigation. In addition to their anticipation defenses B&N also have viable defenses against infringement based on several of Microsoft’s patents failing to meet the specification standards of 35 U.S.C. ss 112.

Section 112 requires that a patent

“shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.”

A patent, whether basic or for improvements, must comply accurately and precisely with the requirements of this section. Patents in a crowded field long a subject of experimentation and
invention must be subjected to close judicial scrutiny. Factors to consider in determining whether patent has been enabled are amount of experimentation necessary, amount of direction or guidance presented, presence or absence of working examples, nature of invention, state of prior art, relative skill of those in art, predictability or unpredictability of art, and breadth of claims. For example, a case in which the court found that one ordinarily skilled in the art of machinery would have to experiment to determine the precise thickness of an essential part of the patented invention constituted sufficient evidence to find a patent invalid for lack of specification.

Here, B&N are asserting this defense against Microsoft’s ‘372, ‘551 patents. As stated before, the ‘372 patent relates to the order of loading webpages using an internet browser. B&N have argued in their letter to the court that this patent lacks any software code that one familiar in the art of programming would be able to use in order to construct a program which employs Microsoft’s ‘372 method. Additionally, because this patent fails to specify an example web browser making use of the method, Microsoft may have failed 112 requirement of setting forth “the best mode contemplated by the inventor of carrying out his invention.” Similarly, the ‘551 patent also lacks code or technical details regarding how one skilled in the art of programming would be able to replicate the claims of ‘551.

B. Patent Misuse

Barnes & Noble have asserted patent misuse as their first affirmative defense. On a claim of patent misuse, if a practice has the effect of extending the patentee's statutory rights and does so with an anti-competitive effect, that practice must then be analyzed in accordance with the rule of reason; under the rule of reason, the finder of fact must decide whether the questioned
practice imposes an unreasonable restraint on competition, taking into account a variety of factors, including specific information about the relevant business, its condition before and after the restraint was imposed, and the restraint's history, nature, and effect. However, the anti-competitive behavior need not rise to the level of anti-trust violations.

Any defendant accused of infringing a patent may argue that the plaintiff has misused the patent and if successful can render the patent unenforceable until the patent is purged, even if the patent has been misused against someone other than the plaintiff. Patent misuse has been generally defined as “an impermissible attempt to extend the time or scope of the patent grant.” As all of Microsoft’s contested patents in this case are still valid as to time under their original grant, B&N will have to show that Microsoft is impermissibly extending the scope of their grant in order to show misuse.

An early example of patent misuse through extending the scope of a patent occurred in *Zenith v. Hazeltine* where a the Supreme Court found that a radio company which would only license its patents as a package of approximately 500 and not individually. This license agreement required royalties to be paid based on how many devices the licensee sold, regardless of whether or not they used the licensor's patents. Similarly, the Court in *Morton Salt* found patent misuse where the plaintiff was making use of its patents to restrain the sale of competitor’s product by requiring their competitors to pay licensing fees for Morton’s patented technology.

In summation, when patent misuse is asserted as a defense the court will look for anti-competitive practices on the part of the patent holder. They will then use the rule of reason to determine if the patent holder’s behavior is an unreasonable restriction on business competition.
Here, B&N has a compelling argument for Microsoft’s licensing policy constituting anti-competitive behavior. Microsoft has already engaged several other companies in licensing plans, which, combined, make up a total of 70% of all smartphones sold in the United States. B&N also have a strong argument that the recent partnership between Nokia and Microsoft will result in anti-competitive behavior. The partnership goes beyond Nokia agreeing to adopt Microsoft software; Nokia CEO, Steven Elop, has confirmed that Microsoft and Nokia plan to combine their patent portfolios to protect their interests in the mobile industry. In their answer to Microsoft’s complaint, B&N allege that this kind of patent sharing rises to the level of per-se anti-trust violations. Additionally, B&N is also alleging that Microsoft’s agreements with HTC and Amazon might contain provisions which control their behavior beyond the scope of Microsoft’s patents. However, the full terms of these deals have never been made public and have not yet come out in discovery and thus it isn’t possible to speculate on whether or not these terms will prove useful to B&N in the course of the litigation.

Barnes & Noble’s best chance of proving that Microsoft’s anti-competitive behavior is an unreasonable restriction on competition is by comparing the terms of Microsoft’s terms for licensing patents to their terms for licensing their own operating systems. Microsoft’s CEO has stated that “Android isn’t Free…as we have asserted in a number of cases there’s an intellectual property royalty due on Android.” According to B&N’s answer, the royalty fee they were offered exceeds that of the cost of licensing the entire Windows Phone operating system from Microsoft. By showing that Microsoft is forcing competitors to choose between costly and time consuming litigation and high licensing fees, B&N has a compelling argument that Microsoft is putting unreasonable restrictions on their competitors to choose Windows Phone over Android to power their devices.
IV. Google Announces Intent to Purchase Motorola Mobility

Google has opted for a different strategy. With Microsoft and other competitors hesitant to sue Google directly, it seemed Google would be unable to help defend against directly. In March of 2011, in response to Apple’s suit against HTC, a Google spokesperson stated, “We are not a party to this lawsuit. However, we stand behind our Android operating system and the partners who have helped us to develop it.”

On August 15, 2011, Google announced its intention to buy Motorola Mobility, the last remaining Android phone manufacturer not in a licensing agreement with Microsoft, for $12.5 billion. Google made its intentions with the purchase clear by stating that Motorola would continue to function as an independent company, but, said Google CEO Larry Page, “Our acquisition of Motorola will increase competition by strengthening Google’s patent portfolio, which will enable us to better protect Android from anti-competitive threats from Microsoft, Apple and other companies.”

Which strategy will be more effective: B&N’s plan to challenge Microsoft directly on the merits of their claims or Google’s to use Motorola’s patent portfolio to force a patent stalemate by making the threat of countersuit too great?

Google’s purchase of Motorola will not be successful as a defensive measure against patent litigation. Motorola’s patent portfolio was insufficient to protect them from litigation from Microsoft and Apple. Motorola launched suit against Apple in October of 2010. Apple, quickly retaliated by filing a countersuit against Motorola in the Delaware and Wisconsin District Courts and with the US International Trade Commission asserting infringement six patents across the three complaints. Recently, the ITC announced that Motorola did not infringe on the three
patents Apple asserted in their complaint. However, Apple’s federal claims still remain in the Western District of Wisconsin, a venue known as a plaintiff-friendly, “rocket docket” that is quick to get patent cases to trial and thus Apple, Inc. might fare better than they did at the ITC.

Microsoft has also filed multiple complaints against Motorola, asserting infringement of nine patents in both the Western District of Washington and with the ITC. Motorola has not fared nearly as well in their battle with Microsoft as the most recent announcement from the ITC regarding the case was an initial determination finding Motorola had indeed infringed upon several of Microsoft’s patents. Thus, Motorola’s patent portfolio has proven insufficient from deterring Android’s two biggest legal threats Apple and Microsoft.

Google’s other Android partners do not think that the merger will aid them either. The proposed merger was announced on August 15, 2011. Since that time, numerous Android partners have signed deals with Microsoft rather than hold out and wait for the Google-Motorola merger to complete and either negotiate for better terms or see if the combined patent portfolios of the two companies would be enough to deter Microsoft from a legal battle. Samsung agreed to a per-device royalty deal with Microsoft on September 29, 2011, over a month after the merger was announced. Samsung is the largest manufacturer and distributor of Android phones and devices and is expected to pay nearly $700 million to Microsoft in per-device license fees. Samsung would not have decided to pay such large fees to a competitor (Samsung also has its own mobile operating system, BadaOS) if it thought it stood a decent chance of defeating Microsoft in a legal battle or if it did not have a reasonable fear of a Microsoft led ITC injunction banning the importation of their phones into the United States.
Most recently, LG Corp, a South Korean conglomerate with a large presence in the consumer electronics and appliance markets also agreed to a Microsoft per-device licensing deal. Microsoft issued a press release on January 12, 2011 announcing the agreement and declaring that 70% of all Android smartphones in the United States were now covered by patent licensing deals with Microsoft.\(^{105}\) LG had far less to lose than Samsung, having only 4% of the US smartphone market share compared with Samsung’s 13%,\(^ {106}\) and yet they too chose to ink a licensing royalty with Microsoft rather than take the risk of waiting for the Google-Motorola merger and face federal and ITC complaints from Microsoft.

Thus, Barnes & Noble’s strategy of defending against Microsoft’s patent claims on the merits will ultimately be the more successful strategy for Android developers to avoid Microsoft’s high royalty fees. Android’s biggest competitors do not seem to fear Motorola’s patent portfolio enough to avoid filing patent infringement claims against them. Nor do Google’s Android partners respect Motorola’s patent holdings enough to wait for Google to acquire Motorola and use their portfolio in defense of Android. B&N, however, have raised a number of compelling arguments in response to Microsoft’s infringement claims and will likely be successful in fending off Microsoft’s legal strategy.

However, this does not mean Google’s purchase of Motorola was in vain. Soon after the sale to Google was announced, sources close to Motorola revealed that they had been in talks with several parties for some time, including Microsoft.\(^ {107}\) Had Microsoft been able to purchase Motorola, not only would Microsoft have added their mobile technology patents to their own portfolio but they also would have eliminated one of Android’s biggest partners. Motorola has 12% of the United States smartphone market share and sold approximately 9.3 million phones in 2011.\(^ {108}\) A purchase by Microsoft would have seen Motorola shift from using Android
exclusively on their phones to adopting Microsoft’s Windows Phone software across their lineup. Thus, while Motorola may not provide the patent defense against Microsoft that Google hoped it would, it was still probably merger of necessity.

V. An Alternative Strategy for Microsoft

Microsoft’s strategy towards Android has proven both lucrative and effective. Their list of Android manufacturers who pay them per-device royalties continues to grow and they have had some early success against Motorola in the US ITC. However, while this strategy is sure to bring them short term revenues they risk losing much more through anti-trust litigation and loss of partners willing to produce Windows Phone devices. Microsoft finds itself in a position to bring an amicable end to the patent war by creating a stalemate between the largest mobile companies. Such an end would not only be in the best interests of consumers, but also of Microsoft.

a. Microsoft’s Patent strategy is Putting it at Risk for Antitrust Violations

Microsoft has faced antitrust charges before.\textsuperscript{109} In 2001, Microsoft was found to have committed monopolization in regards to its desktop operating system business.\textsuperscript{110} As argued above, B&N have put forward a strong argument that Microsoft is engaging in anti-competitive behavior with regards to Android that may rise to the level of antitrust violations. Microsoft has recently been party to two high-profile bulk patent purchases that risk raising the ire of the US Justice Department’s antitrust division.

The first took place in the early part of 2011, when Microsoft organized a technology company consortium, CPTN Holdings LLC, to buy the 882 strong patent portfolio of Novell Inc, an enterprise software company.\textsuperscript{111} Other members of CPTN include Apple Inc. and Oracle, who
are both heavily involved in patent litigation against Google and their Android partners. The deal was quickly investigated by the Department of Justice and in April of 2011 announced that Microsoft and CPTN Holdings had made significant changes in order to comply with federal antitrust regulations. Among these were that Microsoft must acquire the Novell patents under the GNU General Public License, an open source license which automatically terminates if the covered patents are not offered royalty-free. The DOJ stated that the deal would jeopardize the ability of open source software, such as Linux, to innovate and compete. Android is a modified version of the Linux operating system. Though the DOJ has stated that these new terms have alleviated their immediate concerns they also stated that they will continue their investigation into the sale in order to ensure continued competition.

Microsoft’s second big patent purchase of 2011 came in July when it and Rockstar Bidco LP, a joint venture between Microsoft, Apple and RIM (makers of the Blackberry line), formed to purchase the bankrupt Nortel, Inc.’s portfolio of 6000 mobile technology patents. Rockstar was in serious competition from Google, with bidding between the two parties eventually driving the purchase price to more than four times the original offering price of $1 billion. The purchase price dwarfs the revenues from Microsoft’s mobile division, giving them a strong incentive to use these patents offensively in order to recoup their cost.

The American Antitrust Institute, an independent, non-profit advocacy group wrote a letter to the Department of Justice arguing that the three large companies involved in Rockstar Bidco were capable are competitors in the mobile technology space and that such a broad, horizontal collaboration created a significant risk of spillover collusion. The DOJ soon echoed their concerns by investigating the terms of sale and meeting with the members to determine
their intentions. Specifically, the DOJ is reportedly interested in whether or not they plan to use the new patents to launch litigation against competitors using Google’s Android.\textsuperscript{117}

Thus, Microsoft may be at the end of the road for patent acquisition. Their two latest patent acquisition deals have drawn strong investigation from the Department of Justice, who are beginning to take greater interest in Microsoft’s and others efforts against Google’s Android. In their litigation with Barnes & Noble, Microsoft has only claimed infringement of four patents which, as described above, do not present a very strong case despite Microsoft holding an extremely large technology patent portfolio. If B&N are successful in defending against Microsoft their ability to use their patent portfolio to force licensing deals will be severely hampered.

b. Microsoft is at Risk of Losing Partners Willing to Develop Windows Phone Devices

In addition to antitrust concerns weakening Microsoft’s ability to increase their share of the smartphone market, their aggressive strategy may also alienate their targeted companies and reduce their desire to develop devices using Windows Phone software. HTC, Samsung and LG all produced phones using Microsoft’s software, but Android devices still represent the vast majority of these companies mobile sales. HTC has produced only four Windows Phone devices since their royalty deal with Microsoft, but has launched twenty-nine Android devices since that time, despite having to pay a per-device royalty fee. Samsung has released three Android phones since singing their agreement with Microsoft but has released only one Windows Phone device in the US since that time. Thus, Microsoft’s strategy has not been effective in convincing phone manufacturers to build devices using their software.
Microsoft’s purchase of Nokia will not alleviate the Microsoft’s problems. Though Microsoft’s partnership with Nokia means that the Finnish company will now adopt Windows Phone as their sole operating system for their new smartphones, this will not help Microsoft capture the market share they desire. Nokia’s share of the smartphone market share has fallen to just over 1% in 2011, down from 10% in 2010.\textsuperscript{118} Nokia reported sales of 1 million Lumia 800’s, their first device with Windows Phone, in the fourth quarter of 2011.\textsuperscript{119} In comparison, Apple’s latest phone, the iPhone 4s sold 4 million in its first weekend\textsuperscript{120} and Samsung’s latest Android phone, the Galaxy Nexus, sold 4.4 million in its first month of release.\textsuperscript{121} Thus, Microsoft will need other manufacturing partners besides Nokia to get behind its Windows Phone software.

c. Microsoft is in a Position to Secure Agreements that Could End Patent Litigation Between the Major Mobile Companies

Microsoft’s stick has been insufficient in attracting phone manufacturers to develop devices running Windows Phone, but they are in a position to offer these companies a carrot that would engender goodwill towards Microsoft and encourage these companies to make devices for Microsoft’s platform.

Despite Microsoft’s aggressive strategy towards Android, Android manufacturers are still facing their biggest threat from Apple, Inc., who develop their own devices in-house, do not license their software to other companies and have demonstrated that their strategy towards Android is to stop importation of Android devices were possible and block features from Android phones they believe infringe on Apple patents. Apple continues to pursue Google’s Android partners in litigation across the globe. Apple has only agreed to a single patent cross-licensing deal, a settlement with Nokia that ended two years of litigation, showing that Apple only agrees to such a deal when they have no other choice.\textsuperscript{122}
Microsoft is in a position to protect Android manufacturers from Apple. Microsoft’s recent patent partnership with Nokia means they now have access to patents which Apple has found necessary to license. Additionally, Microsoft’s recent consortium efforts with Apple, Rockstar Bidco LP and CPTN Holdings LLC, show that Apple is willing to work with Microsoft in establishing mutually beneficial patent relationships. By agreeing to use its patent portfolio to protect companies like HTC, Samsung and Motorola from Apple’s more uncompromising litigation tactics, Microsoft could forge deals with these companies that see them adopting Windows Phone in a much more significant manner and give Apple no choice but to back off of their attacks on their most profitable smartphone segment.

This strategy could also help protect these firms from non-practicing entities (NPEs), so-called “patent trolls” who hold patents but do not market products but instead profit through litigation and settlement with larger companies. The cost of these NPEs has been estimated at $83 billion dollars in recent years, spread across dozens of technology companies including Microsoft. A mutually beneficial patent consortium, like Microsoft is capable of creating, would benefit the industry as a whole, reducing legal costs, lost shareholder value and increasing the budget of their research and development divisions to ensure they continue to innovate new benefits for consumers.

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the use of other software. An additional license (8) that license must not be specific to a product and (9) the license must place restrictions on which persons or groups are allowed to use the software (6) may not discriminate against which fields of endeavor included or removed from the source code of the software may be used for, (7) must have a distributable license which persons making its source code publicly available, (3) must allow for derived works based on that source code, (4) allow the author to have their name included or removed from the source code of those derived works at the authors discretion (5) may not discriminate which persons or groups are allowed to use the software (6) may not discriminate against which fields of endeavor the software may be used for, (7) must have a distributable license which does not require the distributees to acquire an additional license (8) that license must not be specific to a product and (9) the license must place restrictions on the use of other software.


4. Open source software must be: (1) freely redistributable, (2) must making its source code publicly available, (3) must allow for derived works based on that source code, (4) allow the author to have their name included or removed from the source code of those derived works at the authors discretion (5) may not discriminate which persons or groups are allowed to use the software (6) may not discriminate against which fields of endeavor included or removed from the source code of the software may be used for, (7) must have a distributable license which does not require the distributees to acquire an additional license (8) that license must not be specific to a product and (9) the license must place restrictions on the use of other software.
11. See Marissa Oberlander, The Smartphone Patent Wars, THE FINANCIAL TIMES, (Oct. 17, 2011, 5:43 PM), http://www.ft.com/cms/s/2/de24970-f8d0-11e0-a5f7-00144feab49a.html#axzz1tgxyQDK (as of this writing Google’s only major suit is with Oracle over Android’s use of the Java programming language, which was acquired by Oracle through its purchase of Sun Microsystems).
13. Id.
17. See Bruce Perens, The Open Source Definition, in OPEN SOURCES: VOICES FROM THE OPEN SOURCE REVOLUTION 1, 3 (1999) (Open source software must be: (1) freely redistributable, (2) must making its source code publicly available, (3) must allow for derived works based on that source code, (4) allow the author to have their name included or removed from the source code of those derived works at the authors discretion (5) may not discriminate which persons or groups are allowed to use the software (6) may not discriminate against which fields of endeavor the software may be used for, (7) must have a distributable license which does not require the distributees to acquire an additional license (8) that license must not be specific to a product and (9) the license must place restrictions on the use of other software).


Letter from HTC Corp to HTC Investors on 2Q Business Review (July 29, 2011).


WAL TER ISAACSON, STEVE JOBS 536 (2011).


*Id.*


See U.S. Patent No. 8,052,301 (filed Nov. 8, 2011).


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35 U.S.C. § 112


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114 Press Release, Dep’t of Justice, CPTN Holdings LLC and Novell Inc. Change Deal in Order to Address Department of Justice's Open Source Concerns (Apr. 20, 2011).

115 Id.


