

# An Analysis of Vringo, Inc.

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## Vringo Company Background

Vringo, Inc. was incorporated in January 2006 in the state of Delaware and began operating during the first quarter of that year. The startup company was originally formed by Jonathan Medved and David Goldfarb to take advantage of the growing popularity of smartphones. The founders saw a tremendous opportunity to reinvent the traditional mobile phone ringtone by displaying visual content on the large screens of modern devices. Vringo capitalized on the growing popularity of social networks such as Facebook, and digital video sharing websites such as YouTube, by combining them with the basic audio ringtone and caller ID platform. This hybrid concept was designed to offer mobile users an extra layer of personalization and integration with social networking.

In March 2012, Vringo entered into a definitive merger agreement with Innovate/Protect, Inc. (I/P). I/P, also a Delaware corporation, was founded in June 2011 as an intellectual property firm. The merger of Vringo and I/P was completed in July 2012. Former Vringo president Andrew Perlman was named Chief Executive Officer of the combined company, replacing Jonathan Medved who stepped down. I/P's Chief Executive Officer and Chief Technology Officer, Andrew K. Lang, took over his new role as President and Chief Technology Officer of Vringo. I/P Engine, a wholly-owned subsidiary of I/P, holds eight patents that were acquired from Lycos, one of the largest search engine websites in the mid-1990s. Mr. Lang was the leader in developing the original patents when he served as Lycos' Chief Technology Officer.

The merger was a significant milestone in the combined company's young history. The synergistic pairing of Vringo with I/P was done to maximize the potential of both organizations. Vringo emerged as a company with core competencies in two of the world's fastest growing technology sectors – mobile social and intellectual property. But more significantly, the merger signaled a conscious effort to expand the business model beyond being a

leading provider of software platforms for mobile social and video applications. It served as the catalyst that thrust Vringo onto the intellectual property scene. This is because Vringo, by way of the merger with I/P, inherited a lawsuit against some very prominent companies. In September 2011, I/P initiated a patent infringement lawsuit against AOL, Inc., Google, Inc., IAC Search & Media, Inc., Gannett Company, Inc., and Target Corporation. The litigation centers on two of the acquired Lycos patents related to internet search and advertising, which is the main source of Google's revenue. The lawsuit is scheduled for a jury trial on October 16, 2012.

Prior to the merger, Vringo was primarily focused on developing software platforms and applications for mobile phones. The video ringtone platform, which included the launch of the Facetones product in late 2011, was central to the company's business. The video ringtone service is what the company considers the next step in the evolution of ringtones – transitioning from standard audio ringtones to high-quality video ringtones that include social networking capabilities and integration with web systems. Users are able to create, download and share video ringtones with one another. A mobile application available for download is also available and is designed to work on over 400 handsets and multiple operating systems.

I/P was created with the specific goal of building an intellectual property portfolio with the intent to monetize it in several ways: licensing, customized technology solutions, strategic partnerships, and litigation. Right after I/P was formed, it immediately acquired the eight Lycos patents. These patents relate to information filtering and search technologies which the company believes are foundational to search engine platforms still in use today. The founders of I/P recognized several key elements are required for the company to successfully monetize its intellectual property portfolio, such as:

- **Strong Leadership Team**
  - Strong management with ability to develop long-term viable strategies and execute the plan
  - Inventors in-house (preferred)
  - Reputable legal team with experience and history of successful patent litigation
- **Intellectual Property Assets**
  - Valid and enforceable
  - Not easily overturned, able to hold up during reexamination
  - Contain key claims that are not overly broad and can be used to prove other companies are infringing
- **Cash on Hand or Ability to Raise Cash to Execute Business Plan**
  - Sufficient capital to survive lengthy legal battles with large defendants that are often in a stronger position financially
  - Resources to allow in-house inventors to continue research and development work and process patent applications
  - Ability to acquire additional intellectual property assets when opportunities arise

The I/P management team and board of directors consisted of well-known, experienced individuals in the world of intellectual property. Key team members include:

- Andrew K. Lang – Former CTO of Lycos and key inventor of the acquired Lycos patents, CEO and CTO of I/P before the merger. Current CTO, President and Director of Vringo.
- Donald M. Kosak – Technical consultant and patent co-inventor.
- Donald E. Stout – Co-founder of NTP, Inc. – which reached a \$612.5 million settlement in 2006 with Research in Motion (RIM), former U.S. Patent examiner. Current Director and Chairman of Vringo's Intellectual Property Committee.

- David L. Cohen – Former Senior Litigation Counsel at Nokia, Special Counsel of I/P before the merger. Current Head of Litigation & Licensing for Vringo.
- Dickstein Shapiro LLP – Nationally ranked intellectual property litigation law firm representing I/P in current legal dispute.

At the time of the merger, I/P's resources were mainly limited to litigation related activities. However, it was still looking for ways to expand its patent holdings beyond the original Lycos patents. The merger with Vringo accomplished just that, as the newly combined company emerged with the resources and team capable of acquiring and managing additional intellectual property. While it may be natural to jump to the conclusion that its business model would be evenly split between the Vringo video technology business and I/P's intellectual property business, it is appropriate to take a step back and see the big picture that is developing. As stated earlier, although Vringo already owned patents, the merger with I/P catapulted Vringo into the business of intellectual property monetization. Although the Vringo name was kept for the newly formed company, video ringtones is no longer the defining label for the company. While video technology will still be an important component of the company, it is clear that management is expanding its business model to become a powerful force in the intellectual property world.

Over the past several years, we have seen many prominent patent infringement disputes decided in the courts. Sometimes the cases involve the giants (e.g. Apple vs. Samsung), and oftentimes a small company takes on one of the titans (e.g. i4i vs. Microsoft). While views on this subject may vary, the reality is that patent litigation is a tool and a weapon that companies can choose to protect its intellectual property when those who are using the patents refuse to commercially license it. Vringo is currently focused on the current patent litigation covering internet search and advertising. By way of the merger, the company committed itself to this

action when I/P was brought on board under the Vringo umbrella. This is a very important event as it will help shape the future of the company. Vringo is poised to aggressively expand its intellectual property portfolio by developing its own patents internally, as well as making patent acquisitions. A win against Google and the other defendants will provide the company with the necessary resources to execute its strategic plan.

When a company is successful in a major patent litigation case, the win does a couple of things. First, the monetary damages awarded may be significant and allow the company to pursue other potential infringers of the same technology. Second, a patent litigation victory serves to bring credibility to the patent portfolio and may encourage others that are using the technology to commercially license the patents and avoid future litigation. If Vringo loses the lawsuit it could severely hinder the company's ability to monetize the Lycos patents going forward.

Despite the financial commitment that patent litigation demands, Vringo made another noteworthy move in August that falls in line with its current business plan to expand its patent holdings. The company agreed to purchase over 500 global patents and patent applications from Nokia, including 109 patents issued in the United States. The patents cover mobile telecommunications technologies primarily related to cellular infrastructure. Vringo raised \$31.2 million in proceeds by issuing stock, and immediately used \$22 million to purchase the patents. This transaction highlights the direction Vringo wants to follow. While there is a lot at stake in the pending litigation against Google, the company has diversified its patent holdings and created an additional monetization opportunity. The move to acquire the mobile patents also demonstrates management's willingness to take action and its ability to raise capital when needed to acquire a portfolio it believes has strategic value. Going forward, Vringo wants to continue to build its intellectual property portfolio. No doubt, the company has a full plate to deal with now, given its current case against Google and the work

needed to enforce the mobile patent portfolio. Nevertheless, Vringo has demonstrated it has the resources and capability to further expand its intellectual property holdings.

The company has made a huge splash in the intellectual property world in a very short period. In 2012 alone, the company merged with I/P and inherited a major patent infringement lawsuit, and more recently it acquired a mobile telecommunications patent portfolio from Nokia. What should not be lost in all of this is how quickly the company will get its first major lawsuit decision – good or bad – under its belt. Just three months after the merger was completed, the litigants will be in court facing a jury trial. The company is aggressively making strategic moves to transform itself into a key player in the intellectual property space.



## Video Technology Business

Vringo develops and licenses a variety of software and services related to mobile entertainment and mobile marketing. The company initially started as a video ringtone provider for mobile phones, but has since expanded its offerings to include a variety of social and video applications. Increasing its product line has allowed Vringo to generate multiple revenue streams including consumers, mobile carriers, and handset manufacturers. To date, Vringo has created four distinct application platforms: Video Ringtones, Facetones, Video ReMix, and Reality TV / Fan Loyalty.

The Video Ringtone platform was the company's primary product since inception and was offered free of charge to consumers through the end of 2009. In recent years, Vringo has commercialized this service by partnering with mobile carrier and service providers. Mobile users pay a monthly fee to subscribe to the service and Vringo receives the majority of the revenue split with its partners. The monthly user subscription includes basic access to the video ringtone service and no data traffic charges are incurred. Also, users can purchase premium content for an additional fee. Vringo has successfully teamed up with partners in several different geographic markets including Celcom (Malaysia), Etisalat (United Arab Emirates), Everything Everywhere (United Kingdom), Hungama (India), Maxis (Malaysia), and Starhub (Singapore). As of mid-August 2012, Vringo reports there are 227,000 paid mobile video ringtone subscribers.

Vringo has filed 24 patent applications for this platform, including three that have been granted in the United States. The video ringtone library is quite substantial as it includes over 20,000 different video clips. Additionally users have the option to create, edit, and share their own video ringtones on an internet-enabled personal computer or mobile device. The company has also developed a suite of tools for its mobile partners, which allows them to offer exclusive and co-branded content to their customer base. Going

forward, Vringo plans to increase its global video ringtone partnerships with a focus on the more lucrative markets of Europe and North America.

Facetones™ is a social video ringtones platform that combines standard caller ID functionality with photos from social media websites such as Facebook and LinkedIn. With Facetones, Vringo has taken its traditional video ringtone concept and added extra layers of personalization and integration with social networking. The Facetones mobile application is available to smartphone users via the Apple App Store, Google Play (the Android Market), and the Nokia Store (formerly the Ovi Store). In addition, consumers can download the app from popular stores such as AppBrain, GetJar, and Mobango. Although the Facetones app is available on a number of different mobile operating systems, it is noteworthy to acknowledge that a large majority of Facetones users are utilizing the Android operating system. Vringo announced it had entered into an agreement with Facebook, Inc. in February 2012 to clarify the company's permitted use of the Facetones trademark and internet domain name ([www.facetones.com](http://www.facetones.com)).

In 2011, Vringo launched Facetones for Verizon subscribers through its V CAST applications storefront, through Telefonica in both Spain and South American, and with NTT DOCOMO in Japan. In February 2012, Vringo announced the app had surpassed one-million downloads. The company believes the Facetones application will continue to grow both in terms of user volume and product development. With the advancement of Facetones, as well as the continued evolution of the mobile application market, Vringo will continue to monitor and adjust its revenue model for the platform. Monetization methods have varied from offering consumers monthly subscription services, offering a one-time purchase, and offering free services that display advertisements (which generate CPI and/or CPA revenues<sup>1</sup>).

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1. CPI, or cost per impression, refers to an advertising pricing model whereby the advertiser agrees to pay a content provider a specific dollar amount each time an ad is displayed to a consumer. CPA, or cost per action, is an advertising pricing model based on qualifying actions taken by a consumer. This usually involves the user clicking on a displayed advertisement and taking additional action, such as registering for a service or purchasing a product.

The Facetones platform is also being monetized through software licensing agreements with handset manufacturers. In November 2011, Vringo announced a licensing agreement with ZTE to preload the Facetones app on certain ZTE mobile handsets. Per the terms of the agreement, Vringo will collect a royalty for each device that includes its software. The first devices preloaded with Facetones were reported as ZTE's GrandX smartphones which were scheduled to be released in the United Kingdom near the end of summer 2012. Vringo has also announced an agreement with Nokia where a customized version of Facetones will be included in certain Nokia Asha Touch mobile phones. The project will reportedly be completed by the end of 2012 and involves targeting emerging markets such as India, Africa, and South America.

The third application platform is Video ReMix, a branded sponsorship product that involves partnering with music artists, manufacturers, and other commercial entities. Vringo's Video Remix applications allow mobile device users to create and edit their own music videos on an interactive video soundboard. These videos can then be viewed and shared with others via email, Facebook, Twitter, or YouTube. The first Video ReMix application launched by the company was entitled "Booty Symphony" and was developed with the artist T-Pain's music production company, Nappy Boy Enterprises. Vringo later produced a customized app for Heineken called "Star Mix" that featured music from the musical group Dirty Vegas as well as video footage from the Coachella Music and Arts Festival event. These branded apps are designed to work on both Apple's iOS and Google's Android operating system. Vringo has been able to monetize these applications directly through sponsorship, advertisement, and direct consumer purchases at various mobile app stores.

The Reality TV platform showcases Vringo's ability to design and produce rich media entertainment content for its partners and sponsors. Reality TV / Fan Loyalty applications have been developed specifically to allow television

audiences to interact with contestant based reality TV shows. Functionality includes interactive voting, communicating with other users and contestants on the show, and downloading video clips to use as video ringtones. In 2011 Vringo launched its first Reality TV app in a partnership with the Middle East's largest entertainment company, Rotana. The application was integrated with the "Star Academy" reality music show, which was extremely popular and available in over 10 countries in that region. Nokia sponsored the product and it was made available as a free, ad-supported download exclusively through the Nokia storefront. During the show's season there were over 200 thousand downloads of the app. Early in 2012 Vringo reported that it had entered into an agreement with Endemol to possibly develop additional sponsored versions of this application.

Although Vringo has generated multiple revenue streams from its core video technology business, revenues from its application platforms have been modest. From inception through the first half of 2012, the company has recorded \$1.15 million through partnerships and sales. However, the company is uniquely positioned to capitalize on the tremendous growth being forecasted for the next generation of advanced communications. Mobile video, mobile social applications, and mobile messaging are all projected to grow exponentially over the next several years. With its current partnerships, as well as new strategic business alliances that may be formed, Vringo has an excellent opportunity to increase revenues from this segment of its business.

## Intellectual Property Business - Internet Search Portfolio

A major component of Vringo's intellectual property business is the Innovate/Protect, Inc. (I/P) patent portfolio that covers internet search and advertising. The company plans to monetize these assets through licensing agreements and strategic partnerships with advertising providers and other businesses who have adopted the patented technology. The immediate focus of the company will continue to be obtaining a positive resolution in the major patent infringement lawsuit scheduled for trial on October 16, 2012. Vringo also plans to expand its patent portfolio by means of internal development and the acquisition of additional intellectual property.

The initial I/P patent portfolio consists of eight patents acquired from Lycos in 2011. These patents relate to information filtering and search functionality, and form the foundation of modern internet search and advertising search filtering systems.

### Innovate/Protect Internet Search Patent Portfolio

U.S. Patent Number	Filing Date	Issue Date	Patent Title	Listed Inventors	Original Assignee
5,867,799	Apr 4, 1996	Feb 2, 1999	Information system and method for filtering a massive flow of information entities to meet user information classification needs	Andrew K. Lang Donald M. Kosak	Lycos, Inc.
5,983,214	Nov 5, 1998	Nov 9, 1999	System and method employing individual user content-based data and user collaborative feedback data to evaluate the content of an information entity in a large information communication network	Andrew K. Lang Donald M. Kosak	Lycos, Inc.
6,029,161	Nov 19, 1998	Feb 22, 2000	Multi-level mindpool system especially adapted to provide collaborative filter data for a large scale information filtering system	Andrew K. Lang Donald M. Kosak	Lycos, Inc.
6,308,175	Nov 19, 1998	Oct 23, 2001	Integrated collaborative/content-based filter structure employing selectively shared, content-based profile data to evaluate information entities in a massive information network	Andrew K. Lang Donald M. Kosak	Lycos, Inc.
6,314,420	Dec 3, 1998	Nov 6, 2001	Collaborative/adaptive search engine	Andrew K. Lang Donald M. Kosak	Lycos, Inc.
6,640,218	Jun 2, 2000	Oct 28, 2003	Estimating the usefulness of an item in a collection of information	Andrew R. Golding Douglas H. Beeferman	Lycos, Inc.
6,775,664	Oct 22, 2001	Aug 10, 2004	Information filter system and method for integrated content-based and collaborative/adaptive feedback queries	Andrew K. Lang Donald M. Kosak	Lycos, Inc.
7,228,493	Mar 9, 2001	Jun 5, 2007	Serving content to a client	Donald M. Kosak Michael J. Witbrock	Lycos, Inc.

Andrew K. Lang, who served as I/P's Chief Executive Officer and Chief Technology Officer prior to merger, was the leader in developing these technologies. Mr. Lang, who now serves as President and Chief Technology

Officer of Vringo, is listed as a co-inventor on six of the patents. Donald M. Kosak, who remains a technology advisor to I/P, was the other co-inventor of those six patents. Mr. Kosak is listed as an inventor on one additional patent of the original eight. Both Mr. Lang and Mr. Kosak previously served as Chief Technology Officer for Lycos.

Prior to the merger, I/P initiated litigation in the United States District Court, Eastern District of Virginia, against AOL, Inc., Google, Inc., IAC Search & Media, Inc., Gannett Company, Inc., and Target Corporation for infringing two of the patents acquired from Lycos. The two asserted patents are U.S. Patent No. 6,314,420 and U.S. Patent No. 6,775,664, both of which list Lang and Kosak as inventors. The Eastern District Court of Virginia is considered to be one of the swiftest and most sophisticated federal courts in the United States. The case was assigned to the Norfolk Division with the Honorable Raymond A. Jackson presiding.

In the lawsuit, I/P alleges the defendants have utilized the two asserted patents within their own search and search advertising systems. By incorporating the foundational relevance filtering technology created by Lang and Kosak into their systems, the defendants have been able to optimize their commercial activities and achieve significant profitability. Specifically, both Google and AOL have generated billions of dollars of revenue through their search advertising businesses. Examples of these companies' products that have been alleged to infringe on the I/P patents are: Google AdWords, Google AdSense for Search, Google AdSense for Mobile Search and AOL's Search Marketplace.

On June 15, 2012 Judge Jackson issued the Markman Order, or patent claim construction, for the lawsuit's six disputed terms. According to a Dow Jones report<sup>1</sup>, the court sided with I/P on four of the six term definitions. The defendants subsequently challenged two of the definitions. On August 16, Judge Jackson determined that one of the terms should be amended due to

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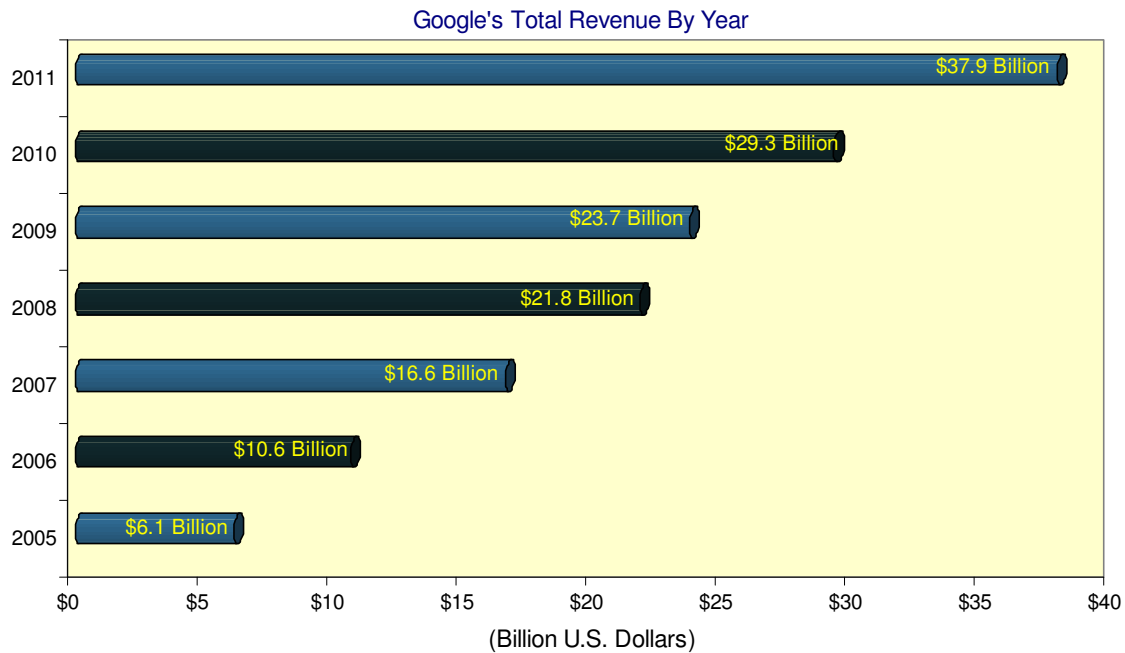
1. Ben Fox Rubin, *Judge Sides With Vringo on Most Definitions in Patent Suit*, <http://on.wsj.com/QrTuxm> (June 18, 2012).

a misunderstanding of the court. The second term was left unchanged from the prior ruling. After the decision to grant the defendants' motion for reconsideration in part and deny in part, Vringo issued the following statement:

"We are pleased that the Court agreed with us that the defendants failed to sufficiently show that the Court's previous conclusion on one of the terms warranted reconsideration. In the Court's reconsideration of the second term, we believe that the Court clarified its interpretation in a manner that is consistent with the proposals submitted by the plaintiff and all defendants in the case."

On July 30, 2012, I/P entered into a partial settlement agreement with AOL. Vringo reported that this settlement involved the company receiving a \$100,000 payment in exchange for granting AOL a partial release to certain claims in the patent infringement lawsuit. AOL remains a defendant in the main portion of the case. The complete details of the settlement agreement have not been made available to the public.

Google is undoubtedly the biggest defendant in the patent infringement lawsuit. The advertising giant reported over \$37 billion in total revenues earned in fiscal year 2011. Google also reported that advertising revenues were the source of 96% of that sum, a percentage that has remained fairly consistent over the last several years. According to the original complaint, I/P is seeking reasonable compensatory damages for the full period of infringement. Based on an original filing date of September 15, 2011, that period would begin Sept 15, 2005 and extend through the expiration of the two asserted patents in 2016. The litigation covers only domestic activity, which for Google amounts to slightly less than 50% of its overall advertising revenues. The following chart lists Google's annual total revenues from 2005 – 2011:



In its filing, I/P stated that its patented technology was known to Google in part from a prior litigation. It also claims that AOL knew about the patented technology as AOL is the owner of at least one related patent that actually references one of the Lang/Kosak patents being asserted in the lawsuit. Due to their knowledge of the existence of the Lang/Kosak patents, the potential exists for Google and/or AOL to be found guilty of willful infringement. Should it receive a favorable decision, I/P may act to seek enhanced damages for past infringement – which would be a multiple of up to three times the actual damages awarded.



## **Intellectual Property Business – Telecommunications Portfolio**

In addition to owning intellectual property relating to internet search and advertising and its foundational video ringtones business, Vringo recently acquired mobile telecommunications patents. On August 9, 2012, the company reached an agreement with Nokia to purchase patents and patent applications covering a variety of cellular infrastructure technologies. Per the terms of the purchase agreement, Vringo paid \$22 million up-front for the patent portfolio and will also pay Nokia a percentage of future licensing proceeds associated with the portfolio. Vringo will retain 100% of the revenue generated from licensing these patents up until it recovers the initial \$22 million. Thereafter, the company will pay Nokia a royalty of 35% on licensing proceeds generated.

This patent portfolio transaction highlights a very interesting relationship between Vringo and Nokia. In 2011 the two companies partnered to launch Facetones on certain Nokia devices. Nokia also sponsored Vringo's first Reality TV app that same year. In 2012, they began developing a customized Facetones product for Nokia's Asha phone family. Perhaps the most significant connection between the two companies is David L. Cohen, who currently serves as Head of Litigation & Licensing for Vringo. Prior to joining the company<sup>1</sup>, Mr. Cohen was Senior Litigation Counsel for Nokia, a role he held for nearly five years. At Nokia, Mr. Cohen had many responsibilities including overseeing the high profile patent dispute with Apple. That multijurisdictional litigation began in October 2009 when Nokia sued Apple for patent infringement. In June 2011 the companies settled the dispute with Apple agreeing to pay Nokia a one-time payment as well as ongoing royalties relating to future sales of Apple's iPhones. The details of the settlement agreement were never made public, but the deal was widely considered to be a major win for Nokia and Mr. Cohen's legal team. Bernstein Research analyst Pierre Ferragu estimated that the one-time Apple payment to Nokia was €500 (approximately \$715 million) and that ongoing

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1. Mr. Cohen served as Senior Litigation Counsel for Nokia from April 2007 through February 2012. He joined Innovate/Protect, Inc. (I/P) on February 22, 2012 with the title of Special Counsel. On March 13, 2012, I/P and Vringo entered into a Merger Agreement. Mr. Cohen assumed the role of Head of Litigation and Licensing at Vringo in August 2012, which corresponds with the timing of the Nokia patent purchase agreement.

royalties amount to slightly more than 1% of the cost per device that Apple pays its contractors to manufacture.

In addition to being successful in the Apple litigation, Mr. Cohen also was involved in several other disputes Nokia had with other companies, including Qualcomm. The rich experience of Mr. Cohen was instrumental in Vringo being able to acquire the Nokia patent portfolio. His presence instantly provides Vringo with a wide variety of expertise relating to intellectual property, and mobile patents specifically. In addition to proven litigation proficiency, Mr. Cohen provides the company with a skill set covering patent analysis, patent acquisition, and patent monetization.

The global telecommunications patent portfolio acquired by Vringo includes 507 total patents and patent applications, including 109 issued U.S. patents. Of the 124 patent families, 31 have been declared essential to various wireless standards such as GSM (2G/2.5G), WCDMA (3G/3.5G), and LTE (4G). The portfolio covers a variety of technologies related to cellular infrastructure: communication management, data and signal transmission, mobility management, radio resources management, and services. This table provides sample patents that demonstrate the diversity of the portfolio:

**Key Telecommunications Patents**

Technology	U.S. Patent No.	Category	Function
Communication Management	6463291	Messaging	SMS Queueing
	7085257	Supplementary Services	Caller Identification
Data and Signal Transmission	7050403	Packet Data	Packet Length Detection
	6549938	Routing and Switching	Packet Prioritization
	6366602	Signaling	Enhanced Terminal to BTS
	7126940	Compatibility	Packet Functionality
Radio Resources Management	6973060	Handoff	BTS Transmission
	7366511	Channel Assignment	SSID Identification
	7489691	Packet Scheduling	BTS Transmission
	7126940	Compatibility	Packet Functionality
	7489632	Load Balancing	Network Traffic Control
Mobility Management	7289807	Location Management	Operation Parameters
Services	7333946	Mobile Transactions and Billing	Wireless E-Ticket
	6288641	Notifications	Remote Monitoring

\*A full list of the acquired patents and patents declared essential can be viewed in **Appendix: Vringo Telecom Infrastructure Patent Portfolio**

### **Communication Management**

The Vringo patents covering communication management relate to messaging and supplementary services. The messaging category involves short messaging service (SMS) and multimedia messaging service (MMS) methods and protocols used by terminal units (mobile devices), base transceiver stations (BTS), base station controllers (BSC), and mobile switching centers (MSC). Supplementary services include call transferring, call waiting, and caller identification.

### **Data and Signal Transmission**

The patents covering data and signal transmission relate to both cellular network voice and cellular network data transmission. Categories for this layer of technology include: packet data, routing and switching, signaling, and compatibility. The patents covering voice transmission involve communications from terminal units, base transceiver stations (BTS), base station controllers (BSC), mobile switching centers (MSC), and the public switched telephone network (PSTN). The data transmission patents also involve similar network communications as well as communicating with GPRS support nodes.

### **Mobility Management**

Vringo's mobility management patents involve cellular network location services, such as tracking the locations of mobile users. The location management patents also involve methods and protocols for allowing voice and SMS transmissions as users move between cellular networks.

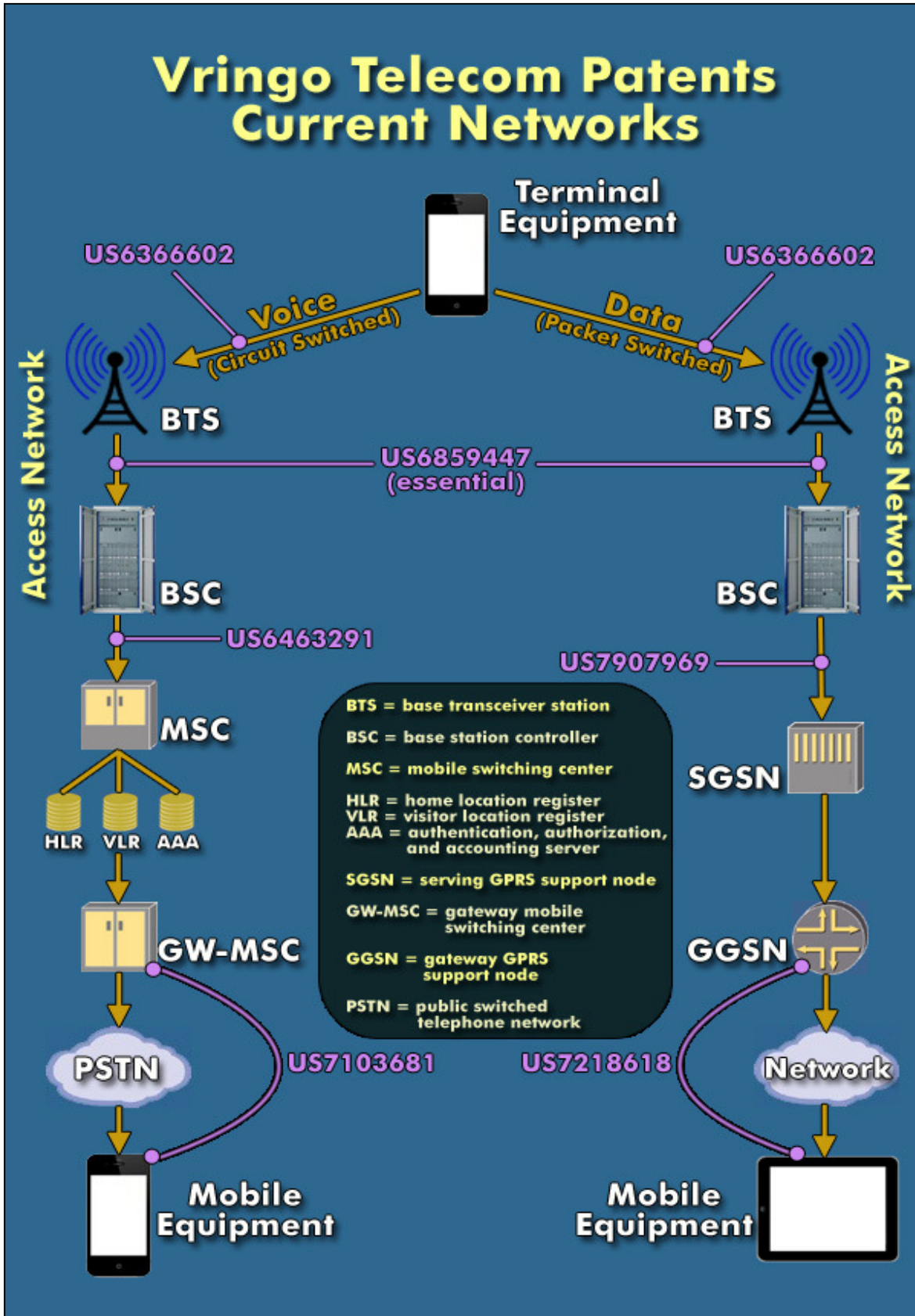
### **Radio Resources Management**

The patents covering radio resources management fall into the following categories: handoff, channel assignment, packet scheduling, compatibility, and load balancing. These technologies involve network communications

between infrastructure components, including routers, switches, and gateways.

### **Services**

The Vringo patents covering services are related to mobile transactions involving billing, electronic ticketing, and remote notifications. These technologies are used in a wide variety of commercial businesses that communicate over mobile infrastructure networks.



The above graphic illustrates several examples of how Vringo's mobile patents intersect current networks. It is not all-inclusive and is intended to demonstrate the breadth of the portfolio.

I believe Vringo has a significant opportunity to license and enforce its telecommunications intellectual property. Because the Vringo mobile patent portfolio covers a broad range of technologies, the company has multiple addressable markets in which it can target. Although the company may pursue licensing opportunities related to such services as multimedia messaging or mobile billing and ticketing, I believe the primary opportunity lies with wireless networking equipment manufacturers. In particular, Vringo will be targeting the global service provider router and switch market. According to Infonetics Research, this market reached an all-time high of \$14.5 billion in 2011 making it the second largest segment of telecommunications. The leading carrier router and switch manufacturers for the year were: Cisco, Alcatel-Lucent, Huawei, Juniper, and ZTE.

Due to the strong business relationship it has built with Nokia, coupled with Mr. Cohen's background and expertise, the company was able to obtain a quality patent portfolio that it is well-equipped to monetize. Nokia has been a recognized global leader in mobile R&D and patented inventions since the 1990s. It has been recognized as a major contributor in nearly all third party research and analysis reports covering essential Intellectual Property Rights (IPR) for 2G, 3G, and 4G standards. As such, Vringo should be confident that its mobile patents will be recognized by industry participants as highly credible and foundational.

It is important to point out that this is not the first non-traditional patent deal that Nokia has transacted in recent years. In 2011, MOSAID Technologies Inc. acquired Core Wireless Licensing SARL, a patent holding company that had previously acquired approximately 2,000 telecommunications patents and patent applications originally filed by Nokia. Funding for the purchase was reported to be an up-front payment of less than \$20,000 and an agreement to split all future royalties. MOSAID will retain 1/3 of the gross royalties and the remaining 2/3 of gross royalties will be further split by Nokia and Microsoft, the latter having licensed the

patents and structured a deal by which it will receive passive royalties. In 2012, Nokia sold 450 wireless patents and patent applications for an undisclosed amount to Sisvel International, an intellectual property manager best known for operating patent pools<sup>2</sup> for various standardized technologies. Per the terms of the deal, Nokia retains a license to use the patents going forward. Sisvel reported that approximately 350 of the purchased patents had previously been declared by Nokia to be essential to 2G, 3G and 4G wireless standards.

As is evident by its recent transactions, Nokia is willing to divest its patent holdings to obtain a strategic advantage. I believe the patent portfolio agreement with Vringo is beneficial to both companies. Nokia received a modest upfront payment as well as a 35% share of future revenues in excess of \$22 million generated by the portfolio. Vringo benefits by being able to obtain licensing royalties on patents for which it has intimate knowledge - in terms of technology, enforcement, and target markets. The average remaining lifetime of the purchased patents is nearly 7 years, which provides Vringo with an ample monetization opportunity. Additionally, the company was able to obtain a significant patent portfolio for a relatively small upfront payment, which is a superior achievement for a very small company. Overall, the patent purchase was a major transformative event for Vringo as the company has now positioned itself as a player in an explosive segment of the mobile marketplace.

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2. A "Patent Pool" is an arrangement whereby multiple standards-essential patent owners agree to make their patents available to each pool participant. The combined patents are also offered to non-participants through licensing agreements. The primary benefits of patent pools are to simplify the process of accessing essential patents and to reduce overall patent licensing costs.

### Projected Scenarios: Short-Term Impact

At the end of September 2012, Vringo had approximately \$12 million in cash and cash equivalents. The company has reported they will have sufficient cash on hand to fund operations and legal expenses related to the current litigation for at least the next 12 months. For purposes of this analysis, I estimate the company has approximately 99 million shares on a fully diluted basis<sup>1</sup>. Vringo has indicated they are likely to acquire additional patent portfolios or other intellectual property assets in the future. Should the company not achieve a positive resolution in the current legal dispute, such strategic acquisitions may require the company to raise additional capital. Conversely, if the company is able to obtain a significant award or favorable settlement agreement with the defendants, they will have the means to make such investments. It is not possible to accurately forecast the financial strength of the company as much depends on the outcome of the current legal dispute. Although the I/P patent portfolio appears to be very strong and the company has a formidable litigation team, patent litigation results are highly unpredictable. This is reflected in the following scenario projections.

#### Projected Scenarios – Short-Term Valuation Ranges

	Description	Amount	Valuation Range*	Per Share**
Scenario A	Vringo Wins Large Monetary Award	\$300-\$500M	\$650M-\$850M	\$6.50-\$8.50
Scenario B	No Patent Infringement Found	-	\$110-\$160M	\$1.10-\$1.60
Scenario C	Verdict Includes No/Limited Damages	-	\$170-\$210M	\$1.70-\$2.10
Scenario D	Favorable Settlement Agreements	\$150-\$250M	\$500-\$600M	\$5.00-\$6.00

\* Short-term valuation ranges do not include the monetization potential of the telecom patents or additional damages associated with willful infringement.

\*\* Price per share based on fully diluted shares outstanding estimate of 99,410,715.

My projected scenarios reflect the uncertainty with regard to the jury trial scheduled to begin October 16, 2012. I have outlined four major possible outcomes to the legal dispute and how each result will affect the short-term market valuation and business strategy of Vringo. Although I believe the company's telecommunications patents have significant value, my assumption is that the market is unlikely to recognize the full value of these

1. Fully diluted shares outstanding: 99,410,715, based on recent company reports and assuming conversion of convertible instruments and 100% vesting of derivatives.



assets in the short-term. For this reason I have not included the value of the telecommunications patents in my short-term valuation projections.

Monetization of the mobile patents and their potential long-term value will be discussed in more detail in the next section of this report.

### **Scenario A: Vringo Obtains Significant Monetary Award**

As mentioned previously in this report, Google is the defendant with the largest amount of revenues derived from search advertising. For the period beginning Sept 15, 2005 and extending through the end of 2011, I estimate the advertising giant's total U.S. based search advertising revenue is slightly more than \$60 billion. Based on Google's financial reporting for the first two quarters of 2012, there is approximately \$9 billion in additional domestic search advertising revenues. Applying a 1% royalty rate to these sales amounts translates into a past damages calculation of over \$690 million. This figure does not include interest and is only through June 30, 2012.

Although a 1% royalty rate may be considered reasonable, I believe a slightly lower figure is more appropriate for my projections. There are a number of considerations the jury will undertake when making their final decision. First, it is unknown what evidence and expert testimony will be presented by the defendants at trial. It is highly likely that Google will present their version of a reasonable monetary figure to the jury that is significantly less than \$690 million. The other defendants may also present their own monetary numbers. Also, jurors may be uncomfortable awarding an extremely large amount of damages. Because of the complexities of patent law and the unpredictable nature of human decision making, I estimate a Vringo victory will be in the range of \$300-\$500 million. Vringo has reported previously that they will retain at least 80% of any received amount.

Winning the lawsuit is the best case outcome for Vringo. The company would be flush with cash and the internet search and advertising intellectual

property would be validated. This would allow Vringo to pursue additional search and advertising licenses for past and current usage from companies that were not a party to the litigation. This would include large companies such as Microsoft and Yahoo. With the large cash position, Vringo could add to and diversify its intellectual property holdings without needing to raise capital. They also would be able to continue with all current and planned internal operations including researching and developing intellectual property in-house. Vringo would be in an optimal position to license their telecommunications patents. A strong balance sheet is very important for small companies looking to monetize their intellectual property. Sitting down at the negotiation table with a strong cash position can not be overstated. Without such financial strength, potential licensees – who for the most part will be large companies with substantial resources – will be reluctant to agree to the type of terms sought by Vringo.

If the jury rules in Vringo's favor to the tune of \$300 to \$500 million, the company could then ask the court to award treble damages. At that point the defendants might choose to settle and avoid additional losses, or they could take their chances with a ruling. Because of the variety of advantages that Vringo would enjoy should they obtain a significant monetary award, I am estimating the market would assign an overall short-term valuation of the company between \$650 - \$850 million. A valuation of that size would translate to \$6.50 - \$8.50 per share of Vringo (VRNG) stock on a fully diluted basis. Of course any positive outcome with an amount higher than \$500 million would require an upward adjustment to the above valuation estimate.

It is also important to consider the potential delay in the company receiving payment should the defendants appeal the jury's decision. I believe that if Vringo wins the lawsuit the defense would have the opportunity to petition the court to overturn the verdict<sup>2</sup>. This would most likely be ruled upon quickly. However, the defense may also appeal to the Court of Appeals for

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2. The defense may file a motion for "judgment notwithstanding the verdict", or JNOV, where they will petition the court to overrule the jury's decision and reverse or amend their verdict. A JNOV is appropriate only if the judge determines that based on the evidence presented that a reasonable jury would not have reached the given verdict. JNOV motions are often requested but rarely granted by the courts.

the Federal Circuit (CAFC). This could potentially result in a significant delay in payment to Vringo. The damages will collect interest during any such delay in payment.

### **Scenario B: Jury Rules No Patent Infringement**

The least favorable scenario for Vringo in the short to intermediate term is a loss at trial. Should the company lose the lawsuit they would be unable to execute their strategic plan as currently outlined. They may be unable to go after additional search and advertising targets that were not part of the litigation. Lacking sufficient resources to provide the company with negotiation leverage, it is unlikely Vringo would be able to maximize the economic benefits of their telecommunications patent portfolio. The company would also not have the cash on hand to pursue additional intellectual property assets. For these reasons, I would expect that Vringo would need to adjust their strategy and raise additional capital. Under this scenario, shareholders would feel an immediate negative impact. A loss at trial, coupled with the likelihood of financing that would be dilutive to current stockholders, would result in a severe stock price decline. I estimate the market would assign a short-term value to the company of approximately \$110 - \$160 million. On a per share basis, that works out to a range of \$1.10 - \$1.60.

Despite the setback, I believe Vringo would still be in a position to grow its business. They would not benefit from a large influx of cash and would therefore need more time to execute their plan. Raising funds would enable the company to begin monetizing their mobile patents, which would become a priority. Vringo would also continue developing their traditional ringtones and mobile applications business. Significant progress in these two segments would provide for an opportunity to acquire new patents and expand their licensing opportunities.

### **Scenario C: Jury Verdict Includes No Monetary Damages**

The jury may find that the defendants violated the I/P patents, but they may only award nominal damages or possibly no damages at all. This potential outcome would be seen as a negative for the company. Vringo would find itself in a position similar to that in Scenario B where they would be lacking the necessary funds needed to execute their strategic plan. I would expect the company to raise cash at some point to take advantage of patent purchase opportunities and to strengthen their licensing position. A key difference in this scenario is that the company may be able to go after additional internet search and advertising targets. In this scenario, I estimate shares of the company would be priced in the \$1.70 - \$2.10 range with a fully diluted valuation of \$170 - \$210 million.

### **Scenario D: Vringo Negotiates Favorable Settlement Agreements**

It is no secret that many patent infringement disputes are settled prior to trial. There are many reasons the defendants may be willing to settle with Vringo rather than risk losing the lawsuit. First, a reasonable jury could rule against the defendants and award an extremely large amount in past damages. Potentially, this amount could be multiplied if the court determines there was willful infringement. There would still be future royalties to consider as the two asserted patents do not expire until 2016. The defendants may also be considering the additional costs of going the distance as well as the likelihood that they will not prevail.

Vringo also has reasons for forgoing the final stage of litigation and entering into settlement agreements with the defendants. The company can eliminate the risks associated with a jury trial by entering into settlement agreements with the defendants. This would be a very positive outcome for several reasons. A settlement would almost certainly include an upfront payment for past infringement that the company could put to use immediately. Vringo would not have to undergo a potentially long and

frustrating appeal process associated with a trial victory. In addition, a settlement would most likely contain a framework for future royalties through 2016 – either to be included in a one-time payment or paid on an ongoing basis.

In this scenario, I estimate an overall settlement amount would be in the range of \$150 - \$250 million. The settlements would most likely cover past and future royalties with fully paid-up licensing agreements. With a strong financial position, Vringo could begin executing its business strategy immediately. This includes targeting additional users of their search and advertising patents, acquiring additional intellectual property, pursuing mobile partnerships, and actively asserting their telecommunications patent portfolio. The company would be in an excellent position to achieve success at an accelerated rate. I project positive settlement agreements as outlined above would command a fully diluted valuation of \$500 - \$600 million, which works out to \$5.00 - \$6.00 per share.

Note: The above projected scenarios are intended to demonstrate how the market will value Vringo based on short-term litigation results. The valuation of the mobile telecommunications patents is not included in any of the scenarios. I believe these assets have significant value potential and should be considered by long-term investors.

## Long-Term Revenue Growth

Following the merger with Innovate/Protect, Inc. and the subsequent acquisition of the Nokia Patents, Vringo has emerged as primarily an intellectual property company. While the company will continue to grow its core video technology business, I believe the primary revenue stream will be the monetization of intellectual property assets. This includes the I/P internet search and advertising patent portfolio, the telecommunications patent portfolio, and additional patent holdings that may be acquired in the future. In the previous section I analyzed several potential outcomes with regards to the I/P patent portfolio and upcoming jury trial. Regardless of how that legal dispute is resolved, Vringo will still be actively enforcing its mobile patent rights. The value of the mobile patents and Vringo's long-term ability to monetize them does not necessarily change with each scenario outcome. What changes is the manner in which the company will achieve a sufficient cash position, a key component for both the success of the licensing program and expanding its intellectual property portfolio. If Vringo is unable to obtain a favorable resolution in the legal dispute, I estimate they will need to raise capital in the amount of \$50 - \$75 million.

Successful monetization of the telecommunications patent portfolio acquired from Nokia will provide a significant revenue stream for Vringo. It is estimated that three-fourths of the portfolio covers cellular infrastructure, and specifically the global service provider router and switch market. Although I believe the company has potential licensing opportunities outside of this market, including those relating to other categories of infrastructure equipment, my revenue estimates for these patents will focus squarely on router and switch manufacturing targets. Leading companies in the sector include Cisco, Alcatel-Lucent, Huawei, Juniper, and ZTE. Vringo has already begun the process of contacting potential licensees for its infrastructure patents. On September 25, 2012 the company sent ZTE a letter asserting its rights to recover damages for all past infringement and request

that ZTE make an offer to license the patents on FRAND<sup>1</sup>-based terms, including a payment for past usage.

Although the company paid \$22 million up-front to Nokia, these patents are clearly worth more than that amount. The structure of the purchase agreement involves a 35% back-end payment on generated revenues in excess of \$22 million. Clearly both parties are optimistic that these inventions can be monetized or else they would not have completed the transaction. There have been a number of high-profile mobile patent purchases that have taken place within the last couple of years. The large sales amounts of these transactions have definitely highlighted the increasing value of wireless intellectual property. Nevertheless, I do not believe comparing transaction prices per patent or applying any form of quantitative analysis are accurate methods of determining the value of patent portfolios. The value of each patent portfolio is best measured by real world licensing and, in some instances, how it holds up in the courtroom.

While it is unknown just how successful Vringo will be asserting its mobile patents, I have made some conservative assumptions in an attempt to provide a rough estimate of this revenue stream. I have broken down potential revenues for the mobile patent portfolio into two categories: past usage and future licensing royalties. From a legal standpoint, the amounts Vringo can collect on past infringement will vary by jurisdiction. The global telecommunications patent portfolio includes issued patents from the U.S., China, Finland, France, Germany, Great Britain, Hong Kong, and the European Patent Office, among others. Based on the breadth of the patent portfolio and the geographic locations of the target manufacturers and sales of their products, Vringo has many enforcement avenues available to them. This includes choosing litigation forums both at home and abroad – with each offering different remedies, such as injunctive relief or royalty-based damages. This situation provides Vringo with significant negotiation leverage when dealing with potential licensees. Therefore, I believe the

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1. FRAND stands for “fair, reasonable, and non-discriminatory”. Intellectual property owners who declare their patents as essential to standards organizations (such as the European Telecommunications Standards Institute or ETSI), agree to a licensing obligation based on FRAND terms. Several of the Nokia patents purchased by Vringo have been declared essential to standards organizations.

company will be able to sign licensing agreements that include payments for a significant amount of past usage.

The table to the right displays historical data for the global service provider router and switch market since 2007. In its negotiations with potential licensees Vringo will base potential past usage royalties using the actual sales amounts of each company. In securing agreements, Vringo may consider offering discounts for past usage in exchange for favorable terms going forward. The company will most likely consider additional incentives relating to past usage in order to facilitate licensing agreements and avoid litigation when possible.

**Global Spending  
Carrier Routing & Switching Equipment**

2007	\$11.2 B
2008	\$12.8 B
2009	\$11.1 B
2010	\$12.8 B
2011	\$14.5 B
2012E	\$14.1 B
<b>Total</b>	<b>\$76.5 Billion</b>

Source: Infonetics Research

**Telecommunications Patents – Potential Licensing Revenue**

	Past Usage	2013	2014	2015	2016
Carrier Routing & Switching Market	\$76.50 B	\$15.00 B	\$15.75 B	\$17.00 B	\$18.25 B
Penetration	30%	30%	35%	50%	50%
Royalties (@ 0.50%)	\$114.75 M	\$22.50 M	\$27.56 M	\$42.50 M	\$45.63
<u>Nokia Obligation (35%)*</u>	<u>\$32.46 M</u>	<u>\$7.88 M</u>	<u>\$9.65 M</u>	<u>\$14.88 M</u>	<u>\$15.97</u>
Vringo Revenue	\$82.29 M	\$14.63 M	\$17.92 M	\$27.63 M	\$29.66 M
<b>Total (pre-tax): \$172 Million</b>					

\*Revenues in excess of \$22 million are split 65% / 35% with Nokia. The first \$22 million in past usage revenue is not split (100% to Vringo).

I have taken a very conservative line when estimating past usage and future royalty amounts. Assumptions include recovering only 30% of past infringement, an average royalty rate of 0.50%, and a \$15 billion target market (with modest growth year over year) beginning in 2013. I estimate Vringo will be able to capture one-half of the target market by 2015 as the company ramps up its licensing program over the next couple of years. It will take some time to secure licensing agreements, possibly 24 months or longer to approach the 50% level, but I believe this is a realistic objective. Using the above variables, I estimate Vringo’s annual revenues from mobile patent licensing will approach \$30 million by 2016 – before taxes and



excluding costs. The company will pay Nokia 35% of the generated proceeds in excess of \$22 million. For illustrative purposes, \$22 million in past usage revenue is exempt from the Nokia obligation in the table above. Over the next four years, my model displays a combined past usage and future licensing royalty revenue amount of approximately \$172 million. Although only a rough estimate, this figure highlights the considerable long-term potential value of Vringo's mobile patent portfolio. When you consider the minimal cash outlay to acquire the patents, the fact that Vringo retains the first \$22 million in generated revenue, and the significant opportunity to monetize the portfolio – the long-term benefits of this transaction become increasingly evident.

Vringo has a very strong licensing team led by David L. Cohen, who has experience negotiating mobile patent licensing agreements with the world's biggest companies. Mr. Cohen also has experience in analyzing and acquiring intellectual property. Going forward, Vringo plans to purchase additional patent portfolios and expand its licensing opportunities. I believe the company will be able to fund such acquisitions by monetizing its mobile patents, which will demonstrate its capability to generate incremental sources of revenue. The growth rate for Vringo can also be accelerated if the I/P internet search and advertising patent portfolio is successfully litigated. Even though the market will focus on the current legal dispute and fast approaching jury trial, the telecommunications patent portfolio represents a significant long-term growth opportunity for Vringo.

## **Conclusion – Risk and Reward**

Vringo is an emerging, small-cap company with two largely untapped intellectual property portfolios and its original video technology business. At the end of September 2012, shares of Vringo (VRNG) stock closed at a price of \$2.90 giving the company a fully diluted valuation of approximately \$288 million. I believe this valuation is reflective of a market that is focused on a litigation resolution associated with the upcoming jury trial. This suggests the company's other potential revenue sources, primarily the telecommunications patent portfolio, are being heavily discounted. Because of this, I minimized the value of the mobile patents in my analysis of the possible outcomes to the legal dispute and their respective short-term impact on Vringo's valuation.

Although I have not included revenue from Vringo's video technology business in my analysis, I still consider it to be an important part of the company. Rising demand for mobile social and entertainment applications bodes well for Vringo going forward. As a clear leader in its field, the company is well positioned to increase its revenues from this segment. Also, partnerships and strategic alliances developed in association with the video ringtone and mobile applications division should serve to enhance the intellectual property model. Positive relationships with manufacturers and other companies in the industry may extend to other areas, such as assisting with licensing negotiations or fostering additional patent deals.

I feel it is appropriate to analyze Vringo from different angles. From a short-term investment perspective, there is the risk of a severe decline in the company's stock should it not obtain a favorable verdict award. Conversely, there is much upside to be gained if Vringo emerges victorious at trial or is able to negotiate positive settlement agreements with Google and the other defendants. Based on the stock price at the end of September, my projected scenarios illustrate an investment reward of nearly 200% and a downside risk in an approximate range of 45%-60%. I believe my award estimates were

very conservative and predicting various stock market reactions is a difficult challenge. With a focus on litigation and the potential short-term impact to Vringo, I consider an ownership position in the current price range to be attractive to investors with a healthy risk appetite.

In my opinion, evaluating the company from a long-term investment perspective provides an even more compelling risk-reward proposition. The purchase of the mobile patent portfolio from Nokia was a clear signal that Vringo has transformed itself into an intellectual property company. The value and importance of patent assets are increasing along with the technological advancements of products and services worldwide. Mobile patent licensing, in particular, is a very lucrative business that has enjoyed increased visibility in recent years with a number of high profile lawsuits and patent transactions. By entering this space, Vringo has put itself in a position to profit from the continued growth of the mobile marketplace. Moreover, the company has set itself up to build upon its own success with plans to expand its patent holdings in the future.

While the market appears to be focusing on the impending legal event, I believe there is much more to the Vringo story. My rough estimate of the company's potential licensing revenue from the mobile patents is approximately \$172 million over the next four years, excluding certain enforcement expenses and taxes. Comparing this figure to the \$288 million company valuation at the end of September highlights the upside potential of this investment. The mobile patent portfolio is unlicensed in the target market sector and Vringo will need to execute its licensing strategy to achieve this level of revenue. With its current leadership team and past experience, I believe the company can produce licensing results that correspond to my estimates. Although I consider my revenue assumptions to be conservative, due to the unpredictable nature of patent enforcement – along with forces outside of the company's control – it may take Vringo longer to achieve my estimates. However, even if mobile patent royalties

amount to only 50% of what has been projected, the current low valuation of the company still presents a favorable risk-return opportunity for long-term investors.

## Appendix: Vringo Telecom Infrastructure Patent Portfolio

### Assigned Patents

Patent / Publication	Title	Status	Family	Country	Filing Date	Filing Number
DE69330097.3	MENETELMÄ SMS-SANOMIEN LÄHETTÄMISEKSI ALERTIA VIIVÄSTÄMÄLLÄ	Grant	2089	DE	17.09.1993	93919376.9
EP660992	MENETELMÄ SMS-SANOMIEN LÄHETTÄMISEKSI ALERTIA VIIVÄSTÄMÄLLÄ	Grant	2089	EP	17.09.1993	93919376.9
FI109064	MENETELMÄ SMS-SANOMIEN LÄHETTÄMISEKSI ALERTIA VIIVÄSTÄMÄLLÄ	Grant	2089	FI	18.09.1992	924198
FR660992	MENETELMÄ SMS-SANOMIEN LÄHETTÄMISEKSI ALERTIA VIIVÄSTÄMÄLLÄ	Grant	2089	FR	17.09.1993	93919376.9
GB660992	MENETELMÄ SMS-SANOMIEN LÄHETTÄMISEKSI ALERTIA VIIVÄSTÄMÄLLÄ	Grant	2089	GB	17.09.1993	93919376.9
US5682600	A METHOD FOR STARTING A SHORT MESSAGE TRANSMISSION	Grant	2089	US	17.09.1993	08/403901
DE69331152.5	METHOD AND APPARATUS FOR SYNCHRONIZING SPEECH FRAMES BETWEENBASE STATIONS	Grant	2314	DE	24.09.1993	93920866.6
EP720805	METHOD AND APPARATUS FOR SYNCHRONIZING SPEECH FRAMES BETWEENBASE STATIONS	Grant	2314	EP	24.09.1993	93920866.6
US5722074	SOFT HANDOFF IN A CELLULAR TELECOMMUNICATIONS SYSTEM	Grant	2314	US	24.09.1993	08/619701
US5600705	METHOD FOR CALL ESTABLISHMENT	Grant	2336	US	20.09.1993	08/387926
CNZL96190165.9	A METHOD FOR SPLITTING AND COMBINING FAX GROUP 3 DATA IN TRANSPARENT HSCSD	Grant	2390	CN	06.03.1996	96190165.9
US5805301	FACSIMILE TRANSMISSION IN A MOBILE COMMUNICATION SYSTEM	Grant	2390	US	06.03.1996	08/732467
CN97192428.7	FAST MOVING MOBILE STATION HANDLING IN A MACRO CELL	Grant	2398	CN	18.02.1997	97192428.7
EP885540	FAST MOVING MOBILE STATION HANDLING IN A MACRO CELL	Abandoned	2398	EP	18.02.1997	97903403
IN200572	FAST MOVING MOBILE STATION HANDLING IN A MACRO CELL	Grant	2398	IN	14.02.1997	304/MAS/97
PH1-1997-55589	FAST MOVING MOBILE STATION HANDLING IN A MACRO CELL	Grant	2398	PH	17.02.1997	I-55589
SG55627	FAST MOVING MOBILE STATION HANDLING IN A MACRO CELL	Grant	2398	SG	18.02.1997	9804369.8
US6285884	FAST MOVING MOBILE STATION HANDLING IN A MACRO CELL	Grant	2398	US	30.11.2000	09/117486
DE69326903	Method for congestion management in a frame relay network and a node in a frame relay network	Grant	2651	DE	14.12.1993	94901974.9
EP788698	Method for congestion management in a frame relay network and a node in a frame relay network	Grant	2651	EP	14.12.1993	94901974.9
GB788698	Method for congestion management in a frame relay network and a node in a frame relay network	Grant	2651	GB	14.12.1993	94901974.9
US5638359	Method for congestion management in a frame relay network and a node in a frame relay network	Grant	2651	US	14.12.1993	08/454233
DE69328565.6	A METHOD FOR CONGESTION MANAGEMENT IN A FRAME RELAY NETWORK AND A NODE IN A FRAME RELAY NETWORK	Grant	2652	DE	14.12.1993	94901973.1
EP673573	A METHOD FOR CONGESTION MANAGEMENT IN A FRAME RELAY NETWORK AND A NODE IN A FRAME RELAY NETWORK	Grant	2652	EP	14.12.1993	94901973.1
FR673573	A METHOD FOR CONGESTION MANAGEMENT IN A FRAME RELAY NETWORK AND A NODE IN A FRAME RELAY NETWORK	Grant	2652	FR	14.12.1993	94901973
GB673573	A METHOD FOR CONGESTION MANAGEMENT IN A FRAME RELAY NETWORK AND A NODE IN A FRAME RELAY NETWORK	Grant	2652	GB	14.12.1993	94901973

JP3273790	A METHOD FOR CONGESTION MANAGEMENT IN A FRAME RELAY NETWORK AND A NODE IN A FRAME RELAY NETWORK	Grant	2652	JP	14.12.1993	6513838
US6064648	METHOD FOR NOTIFYING A FRAME RELAY NETWORK OF TRAFFIC CONGESTION IN AN ATM	Grant	2702	US	21.12.1995	08/875582
AU696034	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	AU	13.1.1995	14180/95
CA2181333	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	CA	13.1.1995	2181333
CNZL95191251.8	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	CN	13.1.1995	95191251.8
DE69528819.9	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	DE	13.1.1995	95905653.2
EP740875	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	EP	13.1.1995	95905653.2
ES2186710	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	ES	13.1.1995	95905653.2
FI94816	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	FI	17.1.1994	940220
FR740875	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	FR	13.1.1995	95905653.2
GB740875	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	GB	13.1.1995	95905653.2
IT740875	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	IT	13.1.1995	95905653.2
JP2927553	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	JP	13.1.1995	7-518860
NZ278086	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	NZ	13.1.1995	278086
US5841774	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXEDATM BUS	Grant	2704	US	13.1.1995	08/676202
US20050240981	SPLIT ADVERTISEMENT	Pending	4561	US	24.06.2005	11/165994
US6961953	SPLIT ADVERTISEMENT	Grant	4561	US	29.12.2000	09/752127
US6577721	CONFERENCE CALL MACRO	Grant	6390	US	30.04.1999	09/302811
US6029065	REMOTE FEATURE CODE PROGRAMMING FOR MOBILE STATIONS	Grant	6815	US	05.05.1997	08/841850
CNZL95197341.X	A METHOD FOR INDICATING A MULTI-SLOT CHANNEL IN A TDMA RADIOSYSTEM	Grant	7158	CN	24.11.1995	95197341.X
NL1001744	A METHOD FOR INDICATING A MULTI-SLOT CHANNEL IN A TDMA RADIOSYSTEM	Grant	7158	NL	24.11.1995	1001744
US6295286	A METHOD FOR INDICATING A MULTI-SLOT CHANNEL IN A TDMA RADIOSYSTEM	Grant	7158	US	24.11.1995	08/836969
CNZL96195981.9	IMPLEMENTATION OF MUTUAL RATE ADAPTATIONS IN DATA SERVICES BETWEEN GSM AND	Grant	7164	CN	29.05.1996	96195981.9
DE69633315.5	IMPLEMENTATION OF MUTUAL RATE ADAPTATIONS IN DATA SERVICES BETWEEN GSM AND	Grant	7164	DE	05.06.1996	96304138.9
EP748136	IMPLEMENTATION OF MUTUAL RATE ADAPTATIONS IN DATA SERVICES BETWEEN GSM AND	Grant	7164	EP	05.06.1996	96304138.9
JP3842335	IMPLEMENTATION OF MUTUAL RATE ADAPTATIONS IN DATA SERVICES BETWEEN GSM AND	Grant	7164	JP	30.05.1996	8-136887
NL748136	IMPLEMENTATION OF MUTUAL RATE ADAPTATIONS IN DATA SERVICES BETWEEN GSM AND	Grant	7164	NL	05.06.1996	96304138.9
RU2153238	IMPLEMENTATION OF MUTUAL RATE ADAPTATIONS IN DATA SERVICES BETWEEN GSM AND	Grant	7164	RU	29.05.1996	97119934
US6081534	IMPLEMENTATION OF MUTUAL RATE ADAPTATIONS IN DATA SERVICES BETWEEN GSM AND	Grant	7164	US	06.06.1996	08/659590

AU716158	NEW 14.4 KBIT/S SERVICE FOR GSM	Grant	7272	AU	31.10.1996	73003/96
US7420948	NEW 14.4 KBIT/S SERVICE FOR GSM	Grant	7272	US	09.09.2005	11/221797
US6173187	ADAPTIIVINEN MENETELMÄ OPTIMAALISEN SIR-TAVOITTEEN ASETTAMISEKSI	Grant	7300	US	25.11.1997	09/117274
US6366602	BCCH-CARRIER CHANGE FOR GSM	Grant	7485	US	03.12.1997	09/117700
US6349099	Connection identification in transmission system of wireless telecommunication network over ATM protocol stack	Grant	7776	US	11.6.1998	09/460158
US6859447	A BASESTATION CONTROLLER (BSC) BASED ON AN ATM SWITCH	Grant	7794	US	30.12.1997	09/607065
AT1068762	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	AT	30.03.1999	99945702.1
AU755890	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	AU	30.03.1999	59468/99
CH1068762	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	CH	30.03.1999	99945702.1
CNZL99804679.5	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	CN	30.03.1999	99804679.5
DE69927492.3	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	DE	30.03.1999	99945702.1
EP1068762	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	EP	30.03.1999	99945702.1
JP4059626	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	JP	30.03.1999	2000-544146
NL1068762	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	NL	30.03.1999	99945702.1
NO325596	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	NO	30.03.1999	20004893
US6456237	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES INTIME	Grant	7882	US	30.03.1999	09/677114
GB2370183	NBR POOL FOR SIMA NETWORK	Grant	7959	GB	20.7.1999	30514.4
US6249816	NBR POOL FOR SIMA NETWORK	Grant	7959	US	22.7.1998	09/120607
DE69935006.9	System and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service	Grant	7960	DE	9.12.1999	99966074.9
EP1135962	System and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service	Grant	7960	EP	9.12.1999	99966074.9
FR1135962	System and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service	Grant	7960	FR	9.12.1999	99966074.9
GB1135962	System and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service	Grant	7960	GB	9.12.1999	99966074.9
IT1135962	System and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service	Grant	7960	IT	9.12.1999	99966074.9
SE1135962	System and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service	Grant	7960	SE	9.12.1999	99966074.9
US6549938	System and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service	Grant	7960	US	10.12.1998	09/209182
US6466794	CHANNEL ALLOCATION	Grant	10215	US	21.01.1998	09/357180
CNZL97192088.5	MT SMS QUEUING AT THE VISITED MSC	Grant	10609	CN	04.02.1997	97192088.5
FI102346	MT SMS QUEUING AT THE VISITED MSC	Grant	10609	FI	05.02.1996	FI 960523
US6463291	MT SMS QUEUING AT THE VISITED MSC	Grant	10609	US	04.02.1997	09/117701

CA2250037	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	CA	27.3.1997	2250037
CNZL97194117.3	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	CN	27.3.1997	97194117.3
DE69738106.4	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	DE	27.3.1997	97908301.1
EP894383	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	EP	27.3.1997	97908301.1
ES894383	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	ES	27.3.1997	97908301.1
FI103456	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	FI	29.3.1996	961442
FR894383	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	FR	27.3.1997	97908301.1
GB894383	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	GB	27.3.1997	97908301.1
HK1017189	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	HK	27.4.1999	99101866.1
IN206503	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	IN	20.3.1997	IN 588/MAS/97
IT894383	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	IT	27.3.1997	97908301.1
PH1-1997-55861	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	PH	17.3.1997	I-55861
US6738374	SPEECH TRANSMISSION IN A PACKET NETWORK	Grant	10732	US	27.3.1997	09/155426
US6085100	METHOD OF ROUTING REPLY SHORT MESSAGES	Grant	10762	US	02.01.1998	09/125752
CNZL98807025.1	ROUTING SHORT MESSAGES	Grant	10765	CN	02.06.1998	98807025.1
DE69834402.2	ROUTING SHORT MESSAGES	Grant	10765	DE	02.06.1998	98924342.3
EP992164	ROUTING SHORT MESSAGES	Grant	10765	EP	02.06.1998	98924342.3
ES992164	ROUTING SHORT MESSAGES	Grant	10765	ES	02.06.1998	98924342.3
FI109511	ROUTING OF MOBILE ORIGINATED SHORT MESSAGES (MO-SM) FORM SMSC TO THE RIGHT	Grant	10765	FI	03.06.1997	FI 972357
FR992164	ROUTING SHORT MESSAGES	Grant	10765	FR	02.06.1998	98924342.3
GB992164	ROUTING SHORT MESSAGES	Grant	10765	GB	02.06.1998	98924342.3
IT992164	ROUTING SHORT MESSAGES	Grant	10765	IT	02.06.1998	98924342.3
JP3988836	ROUTING SHORT MESSAGES	Grant	10765	JP	02.06.1998	11-501673
NL992164	ROUTING SHORT MESSAGES	Grant	10765	NL	02.06.1998	98924342.3
SE992164	ROUTING SHORT MESSAGES	Grant	10765	SE	02.06.1998	98924342.3
US6292669	ROUTING SHORT MESSAGES	Grant	10765	US	02.06.1998	09/454946
US6571284	RADIOTOISTINTEN AUTOMAATTINEN VIRITYS	Grant	10780	US	02.01.1998	09/331764
CNZL00816538.6	CALL ROUTING IN A TELECOMMUNICATION SYSTEM	Grant	10906	CN	29.11.2000	816538.6
EP1234418	CALL ROUTING IN A TELECOMMUNICATION SYSTEM	Grant	10906	EP	29.11.2000	985284.9



GB1234418	CALL ROUTING IN A TELECOMMUNICATION SYSTEM	Grant	10906	GB	29.11.2000	985284.9
US7606261	CALL ROUTING IN A TELECOMMUNICATION SYSTEM	Grant	10906	US	29.11.2000	10/153180
CNZL01810732.X	MANAGEMENT OF SUBSCRIBER DATA IN MOBILE SYSTEM	Grant	10919	CN	04.06.2001	01810732.X
DE60115454.1	MANAGEMENT OF SUBSCRIBER DATA IN MOBILE SYSTEM	Grant	10919	DE	04.06.2001	1938289.4
EP1303942	MANAGEMENT OF SUBSCRIBER DATA IN MOBILE SYSTEM	Grant	10919	EP	04.06.2001	1938289.4
ES1303942	MANAGEMENT OF SUBSCRIBER DATA IN MOBILE SYSTEM	Grant	10919	ES	04.06.2001	1938289.4
FI111594	IP-TEKNIIKAN JA WEB-SIVUJEN HYÖDYNTÄMINEN MATKAPUHELINVERKONTILAAJATIETOJEN	Grant	10919	FI	05.06.2000	20001339
FR1303942	MANAGEMENT OF SUBSCRIBER DATA IN MOBILE SYSTEM	Grant	10919	FR	04.06.2001	1938289.4
GB1303942	MANAGEMENT OF SUBSCRIBER DATA IN MOBILE SYSTEM	Grant	10919	GB	04.06.2001	1938289.4
IT1303942	MANAGEMENT OF SUBSCRIBER DATA IN MOBILE SYSTEM	Grant	10919	IT	04.06.2001	1938289.4
US20040038679	MANAGEMENT OF SUBSCRIBER DATA IN MOBILE SYSTEM	Pending	10919	US	04.06.2001	10/297333
US7012924	Process and unit for configuring or monitoring ATM devices comprising registers	Grant	10969	US	11.1.2000	09/889522
CA2287227	Method to combine the radio and fixed network transmission channels effectively in the fixed	Grant	11159	CA	09.04.1998	2287227
CNZL98804385.8	DATA TRANSMISSION IN A MOBILE NETWORK	Grant	11159	CN	09.04.1998	98804385.8
DE69834917.2	Method to combine the radio and fixed network transmission channels effectively in the fixed	Grant	11159	DE	09.04.1998	98913785.6
EP985288	Method to combine the radio and fixed network transmission channels effectively in the fixed	Grant	11159	EP	09.04.1998	98913785.6
FR985288	Method to combine the radio and fixed network transmission channels effectively in the fixed	Grant	11159	FR	09.04.1998	98913785.6
GB985288	Method to combine the radio and fixed network transmission channels effectively in the fixed	Grant	11159	GB	09.04.1998	98913785.6
IT985288	Method to combine the radio and fixed network transmission channels effectively in the fixed	Grant	11159	IT	09.04.1998	98913785.6
US6353605	Method to combine the radio and fixed network transmission channels effectively in the fixed	Grant	11159	US	09.04.1998	09/418660
DE69733613.1	ROUTING OF PACKETS IN A TELECOMMUNICATIONS SYSTEM	Grant	11162	DE	27.10.1997	97910478.3
EP941592	ROUTING OF PACKETS IN A TELECOMMUNICATIONS SYSTEM	Grant	11162	EP	27.10.1997	97910478.3
FR941592	ROUTING OF PACKETS IN A TELECOMMUNICATIONS SYSTEM	Grant	11162	FR	27.10.1997	97910478.3
GB941592	ROUTING OF PACKETS IN A TELECOMMUNICATIONS SYSTEM	Grant	11162	GB	27.10.1997	97910478.3
IT941592	ROUTING OF PACKETS IN A TELECOMMUNICATIONS SYSTEM	Grant	11162	IT	27.10.1997	97910478.3
US6870839	CROSS-CONNECTING SUB-TIMESLOT DATA RATES	Grant	11338	US	21.9.1999	09/400645
CNZL98812499.8	CALLING SUBSCRIBER VALIDATION	Grant	11399	CN	23.12.1998	98812499.8
DE69829118.2	CALLING SUBSCRIBER VALIDATION	Grant	11399	DE	23.12.1998	98962457.2
EP1053626	CALLING SUBSCRIBER VALIDATION	Grant	11399	EP	23.12.1998	98962457.2

GB1053626	CALLING SUBSCRIBER VALIDATION	Grant	11399	GB	23.12.1998	98962457.2
US6678368	CALLING SUBSCRIBER VALIDATION	Grant	11399	US	23.12.1998	09/594334
US6345091	Telecommunication system and method for implementing an ISDN PBX interface	Grant	11406	US	16.2.1999	09/641381
EP1013132	SWITCH ARRANGEMENT	Grant	11590	EP	14.7.1998	98935047.5
GB1013132	SWITCH ARRANGEMENT	Grant	11590	GB	14.7.1998	98935047.5
US6735203	SWITCH ARRANGEMENT	Grant	11590	US	14.7.1998	09/480235
DE69838103.3	BUFFER MANAGEMENT	Grant	11602	DE	27.10.1998	98950138.2
EP1031253	BUFFER MANAGEMENT	Grant	11602	EP	27.10.1998	98950138.2
FR1031253	BUFFER MANAGEMENT	Grant	11602	FR	27.10.1998	98950138.2
US6549541	BUFFER MANAGEMENT	Grant	11602	US	27.10.1998	09/557467
US6954426	METHOD AND SYSTEM FOR ROUTING IN AN ATM NETWORK	Grant	11674	US	31.5.1999	09/728615
CA2276374	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	CA	26.10.1998	2276374
CN98802213.3	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	CN	26.10.1998	98802213.3
DE69828151.9	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	DE	26.10.1998	98950132.5
EP956714	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	EP	26.10.1998	98950132.5
ES956714	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	ES	26.10.1998	98950132.5
FI105981	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	FI	30.10.1997	974100
FR956714	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	FR	26.10.1998	98950132.5
GB956714	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	GB	26.10.1998	98950132.5
IT956714	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	IT	26.10.1998	98950132.5
JP4317271	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	JP	26.10.1998	11-530114
US6393121	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	US	26.10.1998	09/331874
EP1232646	MENETELMÄ GSM-TILAAJAN LASKUTUKSEN OHJAAMISEKSI KESKITETYN SSP-KESKUKSEN	Publication	14208	EP	23.11.2000	981400.5
US6980791	MENETELMÄ GSM-TILAAJAN LASKUTUKSEN OHJAAMISEKSI KESKITETYN SSP-KESKUKSEN	Grant	14208	US	23.11.2000	10/152353
EP1142236	Data transmission method and a network element	Publication	14268	EP	23.12.1999	99967599.4
JP4477240	Data transmission method and a network element	Grant	14268	JP	23.12.1999	2000-591759
US7792092	Data transmission method and a network element	Grant	14268	US	23.12.1999	09/868819
US6466790	SOLSA AND GPRS	Grant	14541	US	17.01.2000	09/903865
US7031318	Selection of a virtual path or channel in a communications network	Grant	14633	US	20.4.2000	10/013634

US7050403	PACKET LENGTH CLASSIFICATION	Grant	14670	US	12.04.1999	09/970754
BR9917334	TRANSMISSION AND INTERCONNECTION METHOD	Publication	14734	BR	31.05.1999	P19917334.4
CA2374847	TRANSMISSION AND INTERCONNECTION METHOD	Grant	14734	CA	31.05.1999	2374847
CNZL99816695.2	TRANSMISSION AND INTERCONNECTION METHOD	Grant	14734	CN	31.05.1999	99816695.2
JP3782348	TRANSMISSION AND INTERCONNECTION METHOD	Grant	14734	JP	31.05.1999	2001-500582
KR700080	TRANSMISSION AND INTERCONNECTION METHOD	Grant	14734	KR	31.05.1999	7015377/2001
US7072358	TRANSMISSION AND INTERCONNECTION METHOD	Grant	14734	US	31.05.1999	09/997200
DE69940526.2	IP TELEPHONY GATEWAY FOR SOLUTION FOR TELECOM SWITCHES	Grant	14777	DE	14.5.1999	99973857.8
EP1179266	IP TELEPHONY GATEWAY FOR SOLUTION FOR TELECOM SWITCHES	Grant	14777	EP	14.5.1999	99973857.8
FR1179266	IP TELEPHONY GATEWAY FOR SOLUTION FOR TELECOM SWITCHES	Grant	14777	FR	14.5.1999	99973857.8
GB1179266	IP TELEPHONY GATEWAY FOR SOLUTION FOR TELECOM SWITCHES	Grant	14777	GB	14.5.1999	99973857.8
US 11/448132	IP TELEPHONY GATEWAY FOR SOLUTION FOR TELECOM SWITCHES	N/A	14777	US	7.6.2006	11/448132
US7075923	IP TELEPHONY GATEWAY FOR SOLUTION FOR TELECOM SWITCHES	Grant	14777	US	14.5.1999	10/002242
DE69917686.7	Connection management in ATM based network and in ATM network elements	Grant	14786	DE	23.12.1999	99968379
EP1245130	Connection management in ATM based network and in ATM network elements	Grant	14786	EP	23.12.1999	99968379
US7467209	Connection management in ATM based network and in ATM network elements	Grant	14786	US	23.12.1999	10/149734
CA2375995	ARCHITECTURE FOR IP TELEPHONY NETWORK WITH MOBILITY SUPPORT	Grant	14926	CA	12.06.2000	2375995
CN811870.1	ARCHITECTURE FOR IP TELEPHONY NETWORK WITH MOBILITY SUPPORT	Grant	14926	CN	12.06.2000	811870.1
US7502339	ARCHITECTURE FOR IP TELEPHONY NETWORK WITH MOBILITY SUPPORT	Grant	14926	US	21.06.1999	09/337330
BR13975	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Publication	15038	BR	13.09.2000	P10013975.0
CA2384290	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	CA	13.09.2000	2384290
CNZL00812876.6	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	CN	13.09.2000	812876.6
DE60044939.4	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	DE	13.09.2000	966045.7
EP1212919	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	EP	13.09.2000	966045.7
ES1212919	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	ES	13.09.2000	966045.7
GB1212919	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	GB	13.09.2000	966045.7
JP3602501	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	JP	13.09.2000	524385/2001
KR531144	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	KR	13.09.2000	7003438/2002
US7242933	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	US	13.09.2000	10/088452

AU773182	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	AU	11.10.1999	63372/99
BE1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	BE	11.10.1999	99950691.8
CA2385914	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	CA	11.10.1999	2385914
CH1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	CH	11.10.1999	99950691.8
CNZL99816942.0	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	CN	11.10.1999	99816942
DE69923611.8	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	DE	11.10.1999	99950691.8
EP1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	EP	11.10.1999	99950691.8
ES1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	ES	11.10.1999	99950691.8
FR1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	FR	11.10.1999	99950691.8
GB1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	GB	11.10.1999	99950691.8
IT1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	IT	11.10.1999	99950691.8
JP3694266	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	JP	11.10.1999	2001-530235
KR621232	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	KR	11.10.1999	7004651/2002
NL1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	NL	11.10.1999	99950691.8
SE1221212	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	SE	11.10.1999	99950691.8
US7720048	Channel allocation in a network element between at least two networks	Grant	15251	US	11.4.2001	10/297764
JP4357835	PROVIDING MT SERVICES FOR UNREGISTERED SUBSCRIBERS IN R2000IM NETWORKS	Grant	15483	JP	04.01.2002	2002-555050
JP4929248	PROVIDING MT SERVICES FOR UNREGISTERED SUBSCRIBERS IN R2000IM NETWORKS	Grant	15483	JP	06.08.2008	2008-202743
US7043246	PROVIDING MT SERVICES FOR UNREGISTERED SUBSCRIBERS IN R2000IM NETWORKS	Grant	15483	US	04.01.2002	10/035339
CNZL00819649.4	MULTIMEDIA MESSAGING DIGITAL PRINT DESIGNATION FORMAT	Grant	15513	CN	16.06.2000	819649.4
DE60010529.6	MULTIMEDIA MESSAGING DIGITAL PRINT DESIGNATION FORMAT	Grant	15513	DE	16.06.2000	942088.6
EP1295465	MULTIMEDIA MESSAGING DIGITAL PRINT DESIGNATION FORMAT	Grant	15513	EP	16.06.2000	942088.6
FR1295465	MULTIMEDIA MESSAGING DIGITAL PRINT DESIGNATION FORMAT	Grant	15513	FR	16.06.2000	942088.6
GB1295465	MULTIMEDIA MESSAGING DIGITAL PRINT DESIGNATION FORMAT	Grant	15513	GB	16.06.2000	942088.6
US7986422	MULTIMEDIA MESSAGING DIGITAL PRINT DESIGNATION FORMAT	Grant	15513	US	16.06.2000	10/296891
US6934280	Multiple services emulation over a single network service	Grant	16675	US	4.5.2000	09/565675
US7353278	SUBSCRIPTION OF EVENTS IN IMS FROM AN EXTERNAL NETWORK	Grant	16712	US	04.06.2003	10/517532
CN200480014430	TRANSMITTING KEY LOAD/THROUGHPUT FIGURES FOR CLUSTER NODES IN HEARTBEAT	Grant	16875	CN	24.05.2004	200480014430
EP1627316	TRANSMITTING KEY LOAD/THROUGHPUT FIGURES FOR CLUSTER NODES IN HEARTBEAT	Publication	16875	EP	24.05.2004	4734532.7

JP4129473	TRANSMITTING KEY LOAD/THROUGHPUT FIGURES FOR CLUSTER NODES IN HEARTBEAT	Grant	16875	JP	24.05.2004	2006-508328
US7546366	TRANSMITTING KEY LOAD/THROUGHPUT FIGURES FOR CLUSTER NODES IN HEARTBEAT	Grant	16875	US	31.07.2003	10/630972
DE69727641.4	METHOD FOR SENDING A SECURE MESSAGE IN A TELECOMMUNICATION SYSTEM	Grant	17007	DE	04.11.1997	97308890.9
EP841770	METHOD FOR SENDING A SECURE MESSAGE IN A TELECOMMUNICATION SYSTEM	Grant	17007	EP	04.11.1997	97308890.9
FR841770	METHOD FOR SENDING A SECURE MESSAGE IN A TELECOMMUNICATION SYSTEM	Grant	17007	FR	04.11.1997	97308890.9
GB841770	METHOD FOR SENDING A SECURE MESSAGE IN A TELECOMMUNICATION SYSTEM	Grant	17007	GB	04.11.1997	97308890.9
US5909491	METHOD FOR SENDING A SECURE MESSAGE IN A TELECOMMUNICATIONSSYSTEM	Grant	17007	US	06.11.1996	08/744682
US6996195	MMSE INTERPOLATION TECHNIQUES FOR THE LEAST SQUARES CHANNELESTIMATE IN STC	Grant	17122	US	21.12.2000	09/746376
CN2806506.9	CROSS SESSION DICTIONARY FOR COMPRESSION OF TEXT-BASED MESSAGES	Grant	17233	CN	11.03.2002	2806506.9
DE60243027.5	CROSS SESSION DICTIONARY FOR COMPRESSION OF TEXT-BASED MESSAGES	Grant	17233	DE	11.03.2002	02707033.3
EP1378064	CROSS SESSION DICTIONARY FOR COMPRESSION OF TEXT-BASED MESSAGES	Allowance	17233	EP	11.03.2002	2707033.3
IN223183	CROSS SESSION DICTIONARY FOR COMPRESSION OF TEXT-BASED MESSAGES	Grant	17233	IN	11.03.2002	1420/CHENP/2
RU2273091	CROSS SESSION DICTIONARY FOR COMPRESSION OF TEXT-BASED MESSAGES	Grant	17233	RU	11.03.2002	2003130270
US7155173	CROSS SESSION DICTIONARY FOR COMPRESSION OF TEXT-BASED MESSAGES	Grant	17233	US	17.12.2001	10/024412
US7693492	CROSS SESSION DICTIONARY FOR COMPRESSION OF TEXT-BASED MESSAGES	Grant	17233	US	12.09.2005	11/225263
DE60331071	GPRS/UMTS GGSN/IGSN ACTING AS MOBILE IP PROXY	Grant	17242	DE	17.07.2003	3765225.2
EP1523840	GPRS/UMTS GGSN/IGSN ACTING AS MOBILE IP PROXY	Grant	17242	EP	17.07.2003	3765225.2
FR1523840	GPRS/UMTS GGSN/IGSN ACTING AS MOBILE IP PROXY	Grant	17242	FR	17.07.2003	3765225.2
GB1523840	GPRS/UMTS GGSN/IGSN ACTING AS MOBILE IP PROXY	Grant	17242	GB	17.07.2003	3765225.2
US7218618	GPRS/UMTS GGSN/IGSN ACTING AS MOBILE IP PROXY	Grant	17242	US	19.07.2002	10/198599
US6128659	Method and apparatus for resolving dynamic channel assignment conflict in AAL2 negotiation procedure	Grant	17304	US	24.2.1998	09/028804
DE69901031.4	Method and apparatus for efficient switching of partial minicells in ATM adaptation layer 2	Grant	17307	DE	19.5.1999	99924367.8
EP1080601	Method and apparatus for efficient switching of partial minicells in ATM adaptation layer 2	Grant	17307	EP	19.5.1999	99924367.8
US6449276	Method and apparatus for efficient switching of partial minicells in ATM adaptation layer 2	Grant	17307	US	20.5.1998	09/082031
US6717948	Knowledge-based connection admission method and apparatus for providing efficient multiplexing of data and speech over AAL2	Grant	17309	US	30.7.1998	09/126835
CNZL00804632.8	GENERIC LABEL ENCAPSULATION PROTOCOL FOR CARRYING LABEL SWITCHED PACKETS	Grant	17315	CN	09.03.2000	804632.8
US6331978	GENERIC LABEL ENCAPSULATION PROTOCOL FOR CARRYING LABEL SWITCHED PACKETS	Grant	17315	US	09.03.1999	09/264758
DE60039288	MINI PACKET SWITCHING IN IP BASED CELLULAR ACCESS NETWORKS	Grant	17326	DE	03.03.2000	917722.1
EP1157506	MINI PACKET SWITCHING IN IP BASED CELLULAR ACCESS NETWORKS	Grant	17326	EP	03.03.2000	917722.1

FR1157506	MINI PACKET SWITCHING IN IP BASED CELLULAR ACCESS NETWORKS	Grant	17326	FR	03.03.2000	917722.1
GB1157506	MINI PACKET SWITCHING IN IP BASED CELLULAR ACCESS NETWORKS	Grant	17326	GB	03.03.2000	917722.1
IT29517 BE/2008	MINI PACKET SWITCHING IN IP BASED CELLULAR ACCESS NETWORKS	Grant	17326	IT	03.03.2000	917722.1
US6366961	METHOD AND APPARATUS FOR PROVIDING MINI PACKET SWITCHING IN IP BASED	Grant	17326	US	03.03.1999	09/262148
DE60234466.2	Mechanism to create pinhole for existing session in middlebox	Grant	17439	DE	6.12.2002	2788297.6
EP1451705	Mechanism to create pinhole for existing session in middlebox	Grant	17439	EP	6.12.2002	2788297.6
US7420943	Mechanism to create pinhole for existing session in middlebox	Grant	17439	US	6.12.2002	10/314494
CN200580013835	CORRELATION OF SERVICE INSTANCE, R-P CONNECTION AND RADIO CONNECTION IN	Grant	17746	CN	10.03.2005	200580013835
EP1776644	CORRELATION OF SERVICE INSTANCE, R-P CONNECTION AND RADIO CONNECTION IN	Publication	17746	EP	10.03.2005	5725368.4
IN243980	CORRELATION OF SERVICE INSTANCE, R-P CONNECTION AND RADIO CONNECTION IN	Grant	17746	IN	10.03.2005	5366/DELNP/2
JP4672002	CORRELATION OF SERVICE INSTANCE, R-P CONNECTION AND RADIO CONNECTION IN	Grant	17746	JP	10.03.2005	2007-503048
US7558283	CORRELATION OF SERVICE INSTANCE, R-P CONNECTION AND RADIO CONNECTION IN	Grant	17746	US	02.03.2005	11/071492
ZA2006/8432	CORRELATION OF SERVICE INSTANCE, R-P CONNECTION AND RADIO CONNECTION IN CDMA2000 NETWORK	Grant	17746	ZA	10.03.2005	2006/8432
CN200580026870	CELLULAR ENABLED WLAN OPERATION CONFIGURATION	Grant	17918	CN	23.06.2005	200580026870
EP1767009	CELLULAR ENABLED WLAN OPERATION CONFIGURATION	Local filing	17918	EP	23.06.2005	5754686.3
TW94121076	CELLULAR ENABLED WLAN OPERATION CONFIGURATION	Allowance	17918	TW	24.06.2005	94121076
US7289807	CELLULAR ENABLED WLAN OPERATION CONFIGURATION	Grant	17918	US	23.06.2005	11/159700
US6408063	A SUBSCRIBER RELATED INFO TO B-SUBSCRIBER BEFORE CALL IS ANSWERED	Grant	18052	US	05.10.1999	09/412926
CNZL00806049.5	ROTATING SCH TRANSMISSION	Grant	18319	CN	07.04.2000	806049.5
DE60039231.7	ROTATING SCH TRANSMISSION	Grant	18319	DE	07.04.2000	920976.8
EP1166589	ROTATING SCH TRANSMISSION	Grant	18319	EP	07.04.2000	920976.8
FR1166589	ROTATING SCH TRANSMISSION	Grant	18319	FR	07.04.2000	920976.8
GB1166589	ROTATING SCH TRANSMISSION	Grant	18319	GB	07.04.2000	920976.8
IT1166589	ROTATING SCH TRANSMISSION	Grant	18319	IT	07.04.2000	920976.8
NL1166589	ROTATING SCH TRANSMISSION	Grant	18319	NL	07.04.2000	920976.8
US6973060	ROTATING SCH TRANSMISSION	Grant	18319	US	03.01.2000	09/476500
AT1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	AT	18.10.2001	1980558.9
BE1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	BE	18.10.2001	1980558.9
BRPI0114863-	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Publication	18965	BR	18.10.2001	PI0114863.0

CA2426082	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	CA	18.10.2001	2426082
CH1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	CH	18.10.2001	1980558.9
CNZL01817866.9	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	CN	18.10.2001	1817866.9
DE60115947	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	DE	18.10.2001	1980558.9
EP1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	EP	18.10.2001	1980558.9
ES1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	ES	18.10.2001	1980558.9
FI111044	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	FI	24.10.2000	20002337
FR1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	FR	18.10.2001	1980558.9
GB1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	GB	18.10.2001	1980558.9
IT1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	IT	18.10.2001	1980558.9
JP4638470	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	JP	05.09.2007	2007-230678
KR509575	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	KR	18.10.2001	20037005573
NL1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	NL	18.10.2001	1980558.9
SE1330933	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	SE	18.10.2001	1980558.9
SG95367	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	SG	18.10.2001	200301203.6
US7126940	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	US	23.10.2001	10/004084
ZA2003/3108	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN GERAN, SDOMAIN	Grant	18965	ZA	18.10.2001	2003/3108
US7647374	OPTIMIZED SIP SIGNALING FOR MULTIPLE SIMULTANEOUS SIP SESSIONS	Grant	19120	US	03.07.2001	10/483006
CN1701329	A METHOD FOR COLLECTING USAGE BASED INFORMATION FOR CHARGING	Allowance	19264	CN	11.03.2003	3806589.4
EP1500012	A METHOD FOR COLLECTING USAGE BASED INFORMATION FOR CHARGING	Publication	19264	EP	11.03.2003	3706810.3
US7860806	A METHOD FOR COLLECTING USAGE BASED INFORMATION FOR CHARGING	Grant	19264	US	12.03.2002	10/096712
EP1451994	Method and system for handling network congestion	Abandoned	19277	EP	23.11.2001	1274740.8
US7782777	Method and system for handling network congestion	Grant	19277	US	23.11.2001	10/495011
DE60307707.2	SIMPLE ADMISSION CONTROL FOR IP BASED RADIO ACCESS NETWORKS	Grant	19437	DE	20.03.2003	3251763.3
EP1347603	SIMPLE ADMISSION CONTROL FOR IP BASED RADIO ACCESS NETWORKS	Grant	19437	EP	20.03.2003	3251763.3
FR1347603	SIMPLE ADMISSION CONTROL FOR IP BASED RADIO ACCESS NETWORKS	Grant	19437	FR	20.03.2003	3251763.3
US7489632	SIMPLE ADMISSION CONTROL FOR IP BASED RADIO ACCESS NETWORKS	Grant	19437	US	22.03.2002	10/105067
EP1500209	NEW CLIPPING METHOD	Grant	23720	EP	29.04.2003	3722635.4
GB1500209	NEW CLIPPING METHOD	Grant	23720	GB	29.04.2003	3722635.4

US7940857	NEW CLIPPING METHOD	Grant	23720	US	29.04.2003	10/511759
EP1579640	PRIORITIZED RLC RETRANSMISSIONS, WITH MAC BUFFERING	Publication	23857	EP	01.12.2003	3775703.6
US7489691	PRIORITIZED RLC RETRANSMISSIONS, WITH MAC BUFFERING	Grant	23857	US	23.12.2002	10/325736
BE1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	BE	06.07.2000	9944091.8
CH1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	CH	06.07.2000	9944091.8
CN101969326	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Publication	24835	CN	28.10.2010	201010526581
CN1360764	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Publication	24835	CN	06.07.2000	810081
DE60010882.1	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	DE	06.07.2000	944091.8
EP1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Opposition	24835	EP	06.07.2000	944091.8
ES1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	ES	06.07.2000	944091.8
FI111438	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	FI	09.07.1999	991589
FR1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	FR	06.07.2000	944091.8
GB1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	GB	06.07.2000	944091.8
IT1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	IT	06.07.2000	944091.8
JP3977640	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	JP	06.07.2000	2001-509178
KR449817	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	KR	06.07.2000	2001-7016957
NL1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	NL	06.07.2000	944091.8
SE1186119	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	SE	06.07.2000	944091.8
US7724720	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	US	17.07.2006	11/457879
US20080144570	METHOD AND APPARRATUS OF SCHEDULING AND MODULATION/CODING SELECTION FOR	Pending	25862	US	21.02.2008	12/035133
US6901046	METHOD AND APPARRATUS OF SCHEDULING AND MODULATION/CODING SELECTION FOR	Grant	25862	US	26.12.2001	10/025609
US7561509	METHOD AND APPARRATUS OF SCHEDULING AND MODULATION/CODING SELECTION FOR	Grant	25862	US	26.07.2004	10/898354
US6665309	METHODS AND APPARATUS OF CHANNEL ALLOCATION WITH CODE DIVISION MULTIPLEXING	Grant	25975	US	28.06.2002	10/185402
US7050406	METHODS AND APPARATUS OF CHANNEL ALLOCATION WITH CODE DIVISION MULTIPLEXING	Grant	25975	US	12.12.2003	10/735266
US7085257	Network phonebook	Grant	26053	US	06.04.2000	09/544141
US6965562	POOLING H.323 GATEWAYS TO RESTRICT WAN-LINK OVERLOADING	Grant	26126	US	14.12.2000	09/735516
EP1073295	LOCATION UPDATE PROCEDURE IN INTERNATIONAL (OR INTER OPERATIONAL) WIRELESS	Publication	26505	EP	28.07.2000	306448.2
US7171209	LOCATION UPDATE PROCEDURE IN INTERNATIONAL (OR INTER OPERATIONAL) WIRELESS	Grant	26505	US	30.03.2004	10/812171
DE60002904.2	ASSEMBLY AND ASSOCIATED METHOD, FOR REMOTELY MONITORING A SURVEILLANCE	Grant	27006	DE	14.09.2000	958915.1



EP1221149	ASSEMBLY AND ASSOCIATED METHOD, FOR REMOTELY MONITORING A SURVEILLANCE	Grant	27006	EP	14.09.2000	958915.1
FI1221149	ASSEMBLY AND ASSOCIATED METHOD, FOR REMOTELY MONITORING A SURVEILLANCE	Grant	27006	FI	14.09.2000	958915.1
FR1221149	ASSEMBLY AND ASSOCIATED METHOD, FOR REMOTELY MONITORING A SURVEILLANCE	Grant	27006	FR	14.09.2000	958915.1
GB1221149	ASSEMBLY AND ASSOCIATED METHOD, FOR REMOTELY MONITORING A SURVEILLANCE	Grant	27006	GB	14.09.2000	958915.1
SE1221149	ASSEMBLY AND ASSOCIATED METHOD, FOR REMOTELY MONITORING A SURVEILLANCE	Grant	27006	SE	14.09.2000	958915.1
US6288641	REMOTE AUDIO-SURVEILLANCE WITH A MOBILE PHONE	Grant	27006	US	15.09.1999	09/396692
DE1197036	LICENSE CONTROL AT A GATEWAY SERVER	Grant	27008	DE	07.06.2000	935241
EP1197036	LICENSE CONTROL AT A GATEWAY SERVER	Grant	27008	EP	07.06.2000	935241
FI111583	LICENSE CONTROL AT A GATEWAY SERVER	Grant	27008	FI	30.06.1999	991493
FR1197036	LICENSE CONTROL AT A GATEWAY SERVER	Grant	27008	FR	07.06.2000	935241
GB1197036	LICENSE CONTROL AT A GATEWAY SERVER	Grant	27008	GB	07.06.2000	935241
NL1197036	LICENSE CONTROL AT A GATEWAY SERVER	Grant	27008	NL	07.06.2000	935241
US7193995	LICENSE CONTROL AT A GATEWAY SERVER	Grant	27008	US	07.06.2000	10/019893
US7333946	TICKETING WITH PRINTING OPTION	Grant	27014	US	30.04.2001	09/843718
FI111899	A BILLING SOLUTION FOR MULTIMEDIA MESSAGING	Grant	29648	FI	16.06.2000	20001437
US7590225	A BILLING SOLUTION FOR MULTIMEDIA MESSAGING	Grant	29648	US	15.06.2001	09/882756
US6930988	Method and system for fast IP connectivity in a mobile network	Grant	30602	US	28.10.2002	10/282926
DE60331848.7	MOBILE ROUTER COST METRIC FOR ROUTING PROTOCOL UPDATES IN MOBILE ROUTER	Grant	30625	DE	08.10.2003	3751094.8
EP1559242	MOBILE ROUTER COST METRIC FOR ROUTING PROTOCOL UPDATES IN MOBILE ROUTER	Grant	30625	EP	08.10.2003	3751094.8
GB1559242	MOBILE ROUTER COST METRIC FOR ROUTING PROTOCOL UPDATES IN MOBILE ROUTER	Grant	30625	GB	08.10.2003	3751094.8
KR745206	MOBILE ROUTER COST METRIC FOR ROUTING PROTOCOL UPDATES IN MOBILE ROUTER	Grant	30625	KR	08.10.2003	7008153/2005
US7035940	MOBILE ROUTER COST METRIC FOR ROUTING PROTOCOL UPDATES IN MOBILE ROUTER	Grant	30625	US	07.11.2002	10/290031
US6741555	ENHANCEMENT OF EXPLICIT CONGESTION FOR NOTIFICATION (ECN) FOR WIRELESS NETWORK	Grant	31502	US	14.6.2000	09/594463
CNZL02122854.X	METHOD OF TELLING A WIRELESS CLIENT FROM A LOCAL SERVER	Grant	33025	CN	07.06.2002	02122854.X
DE60208990.5	METHOD OF TELLING A WIRELESS CLIENT FROM A LOCAL SERVER	Grant	33025	DE	28.05.2002	2396076.8
EP1265420	METHOD OF TELLING A WIRELESS CLIENT FROM A LOCAL SERVER	Grant	33025	EP	28.05.2002	2396076.8
ES1265420	METHOD OF TELLING A WIRELESS CLIENT FROM A LOCAL SERVER	Grant	33025	ES	28.05.2002	2396076.8
FR1265420	METHOD OF TELLING A WIRELESS CLIENT FROM A LOCAL SERVER	Grant	33025	FR	28.05.2002	2396076.8
GB1265420	METHOD OF TELLING A WIRELESS CLIENT FROM A LOCAL SERVER	Grant	33025	GB	28.05.2002	2396076.8

IT1265420	METHOD OF TELLING A WIRELESS CLIENT FROM A LOCAL SERVER	Grant	33025	IT	28.05.2002	2396076.8
US7085808	METHOD OF TELLING A WIRELESS CLIENT FROM A LOCAL SERVER	Grant	33025	US	07.06.2001	09/876480
US7103681	ADAPTATION SYSTEM PROVIDING TERMINAL-SPECIFIC URLS OF DOWNLOADABLE	Grant	36688	US	19.06.2003	10/601278
EP1680879	METHOD OF INFORMING TERMINAL CAPABILITY TO NETWORK AFTER START-UP OR ON	Publication	36740	EP	28.10.2004	4791765.3
US7478146	METHOD OF INFORMING TERMINAL CAPABILITY TO NETWORK AFTER START-UP OR ON	Grant	36740	US	03.11.2003	10/700346
US7627692	MULTIPLEXING OF COMPRESSED CONTROL AND USER-PLANE MESSAGES	Grant	37366	US	30.01.2004	10/768343
CN200480020637	A MECHANISM FOR ENABLING A MOBILE NODE TO ENGAGE IN IP SIGNALING WITH ITS OFF-	Grant	39894	CN	23.06.2004	200480020637
DE602004033083	A MECHANISM FOR ENABLING A MOBILE NODE TO ENGAGE IN IP SIGNALING WITH ITS OFF-	Grant	39894	DE	23.06.2004	4743792.6
EP1645157	A MECHANISM FOR ENABLING A MOBILE NODE TO ENGAGE IN IP SIGNALING WITH ITS OFF-	Grant	39894	EP	23.06.2004	4743792.6
GB1645157	A MECHANISM FOR ENABLING A MOBILE NODE TO ENGAGE IN IP SIGNALING WITH ITS OFF-	Grant	39894	GB	23.06.2004	4743792.6
PL1645157	A MECHANISM FOR ENABLING A MOBILE NODE TO ENGAGE IN IP SIGNALING WITH ITS OFF-	Grant	39894	PL	23.06.2004	4743792.6
RO1645157	A MECHANISM FOR ENABLING A MOBILE NODE TO ENGAGE IN IP SIGNALING WITH ITS OFF-	Grant	39894	RO	23.06.2004	4743792.6
SE1645157	A MECHANISM FOR ENABLING A MOBILE NODE TO ENGAGE IN IP SIGNALING WITH ITS OFF-	Grant	39894	SE	23.06.2004	4743792.6
US7917152	A MECHANISM FOR ENABLING A MOBILE NODE TO ENGAGE IN IP SIGNALING WITH ITS OFF-	Grant	39894	US	12.02.2004	10/776502
AT1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	AT	16.12.2004	4806376.2
AU2004309946	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	AU	16.12.2004	2004309946
CH1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	CH	16.12.2004	4806376.2
CN200480041579	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	CN	16.12.2004	200480041579
CN200910126587	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	CN	16.03.2009	200910126587
DE1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	DE	16.12.2004	4806376.2
EP1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	EP	16.12.2004	4806376.2
ES1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	ES	16.12.2004	4806376.2
FR1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	FR	16.12.2004	4806376.2
GB1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	GB	16.12.2004	4806376.2
HU1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	HU	16.12.2004	4806376.2
IN3722/DELNP/2	INDICATING INITIAL FLOOR STATE IN SDP	Filing	40217	IN	16.12.2004	3722/DELNP/2
IT1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	IT	16.12.2004	4806376.2
JP4078381	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	JP	16.12.2004	2006-546370
KR761805	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	KR	16.12.2004	2006-7014663

NL1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	NL	16.12.2004	4806376.2
RO1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	RO	16.12.2004	4806376.2
SE1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	SE	16.12.2004	4806376.2
TR1700419	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	TR	16.12.2004	4806376.2
US7920499	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	US	26.03.2004	10/809710
DE602005020445	DISCOVERY OF V4-V6 INTERWORKING ROUTER	Grant	40233	DE	08.06.2005	5748845.4
EP1759519	DISCOVERY OF V4-V6 INTERWORKING ROUTER	Grant	40233	EP	08.06.2005	5748845.4
IN388/DELNP/20	DISCOVERY OF V4-V6 INTERWORKING ROUTER	Filing	40233	IN	08.06.2005	388/DELNP/20
US7710964	DISCOVERY OF V4-V6 INTERWORKING ROUTER	Grant	40233	US	20.08.2004	10/921849
EA10335	PS HANDOVER MECHANISM - LLC SYNCHRONISATION	Grant	40284	EA	18.02.2005	EA200601344/
EP1719352	PS HANDOVER MECHANISM - LLC SYNCHRONISATION	Publication	40284	EP	18.02.2005	5717234.8
RU10335	PS HANDOVER MECHANISM - LLC SYNCHRONISATION	Grant	40284	RU	18.02.2005	200601344
US20080062930	PS HANDOVER MECHANISM - LLC SYNCHRONISATION	Pending	40284	US	14.09.2007	11/898773
US7333793	PS HANDOVER MECHANISM - LLC SYNCHRONISATION	Grant	40284	US	05.04.2004	10/816931
AU2005212893	HSDPA HS-DPCCH DUTY CYCLE	Grant	40312	AU	14.02.2005	2005212893
CN200580010576	HSDPA HS-DPCCH DUTY CYCLE	Grant	40312	CN	14.02.2005	200580010576
IN4685/DELNP/2	HSDPA HS-DPCCH DUTY CYCLE	Filing	40312	IN	14.02.2005	4685/DELNP/2
JP4551902	HSDPA HS-DPCCH DUTY CYCLE	Grant	40312	JP	14.02.2005	2006-553605
US20050278420	METHOD TO GET SUBSCRIBER'S IDENTITIES FROM IMS BASED ON IMSI.METHOD TO CHECK	Allowance	40322	US	26.04.2005	11/114216
EP1797693	REQUEST RATE LIMITER	Publication	40333	EP	26.08.2005	5784113.2
US7583647	REQUEST RATE LIMITER	Grant	40333	US	24.02.2005	11/063967
EP1779697	SCHEDULING NODE B CHANGE DURING SHO	Publication	40609	EP	12.08.2005	5772926.1
IN1569/DELNP/2	SCHEDULING NODE B CHANGE DURING SHO	Local filing	40609	IN	12.08.2005	1569/DELNP/2
JP4954073	SCHEDULING NODE B CHANGE DURING SHO	Grant	40609	JP	12.08.2005	2007-526603
KR927525	SCHEDULING NODE B CHANGE DURING SHO	Grant	40609	KR	12.08.2005	2007-7006069
CN101044771	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Publication	40773	CN	03.11.2004	200480044232
DE602004021646	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Grant	40773	DE	03.11.2004	4798766.4
DK1808029	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Grant	40773	DK	03.11.2004	4798766.4
EP1808029	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Grant	40773	EP	03.11.2004	4798766.4

GB1808029	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Grant	40773	GB	03.11.2004	4798766.4
IN2238/DELNP/2	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Local filing	40773	IN	03.11.2004	2238/DELNP/2
JP4612050	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Grant	40773	JP	03.11.2004	2007-539641
KR912629	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Grant	40773	KR	03.11.2004	2007-7010154
MYMY-142706-A	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Grant	40773	MY	03.11.2004	PI20055102
PK783/2005	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Filing	40773	PK	24.08.2005	783/2005
RO1808029	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Grant	40773	RO	03.11.2004	4798766.4
TW94137753	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Filing	40773	TW	28.10.2005	94137753
US20090156215	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Pending	40773	US	27.04.2007	11/666578
US7283092	ENHANCED SWITCHED BEAM SMART ANTENNAS FOR TD-SCDMA	Grant	40837	US	20.05.2005	11/133277
EP1842386	DOWNLINK DATA OPTIMIZATION FOR PS HANDOVER	Publication	40985	EP	08.12.2005	5824117.5
HR39569	DOWNLINK DATA OPTIMIZATION FOR PS HANDOVER	Publication	40985	HR	08.12.2005	P200703056A
RU2405285	DOWNLINK DATA OPTIMIZATION FOR PS HANDOVER	Grant	40985	RU	08.12.2005	2007132872
UA93039	DOWNLINK DATA OPTIMIZATION FOR PS HANDOVER	Grant	40985	UA	08.12.2005	2007 09534
US7817622	UMA WITH OPTIMISED USER PLANE	Grant	41305	US	12.12.2005	11/298622
EP1964357	SUBSCRIPTION TO RSS/ATOM FEEDS WITH SIP	Local filing	41410	EP	26.10.2006	6809713.8
US20070143502	SUBSCRIPTION TO RSS/ATOM FEEDS WITH SIP	Pending	41410	US	27.03.2006	11/389026
AU2005268547	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Grant	43895	AU	25.07.2005	2005268547
BRPI0514400	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Publication	43895	BR	25.07.2005	PI0514400.0
CA2575106	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Filing	43895	CA	25.07.2005	2575106
CN200580032286	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Grant	43895	CN	25.07.2005	200580032286
EP1779684	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Publication	43895	EP	25.07.2005	5772981.6
HK8102265.6	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Publication	43895	HK	28.02.2008	8102265.6
IDW00200700292	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Filing	43895	ID	25.07.2005	W00200700292
IN856/DELNP/20	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Local filing	43895	IN	25.07.2005	856/DELNP/20
JP4750114	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Grant	43895	JP	25.07.2005	2007-523168
KR899132	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Grant	43895	KR	25.07.2005	2007-7003351
MX277338	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Grant	43895	MX	25.07.2005	MX/a/2007/001
RU2407236	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Grant	43895	RU	25.07.2005	2007105981

SG200700603.4	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Allowance	43895	SG	26.01.2007	200700603.4
SG200905097.2	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Publication	43895	SG	27.07.2009	200905097.2
US20060020669	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Pending	43895	US	26.07.2004	10/899322
ZA2007/1602	FORBIDDING OF CONTENT ADAPTATION WHEN SENDING A MESSAGE	Grant	43895	ZA	25.07.2005	2007/1602
US20060015520	METHOD TO ENHANCE APPLICATION CONTENT PURCHASE PROCEDURE	Pending	44802	US	14.06.2004	10/868499
CN101112048	SMART WLAN NETWORK SCANNING	Allowance	44839	CN	20.12.2005	200580047549
EP1829292	SMART WLAN NETWORK SCANNING	Local filing	44839	EP	20.12.2005	5850701.3
KR899331	SMART WLAN NETWORK SCANNING	Grant	44839	KR	20.12.2005	2007-7016572
US7366511	SMART WLAN NETWORK SCANNING	Grant	44839	US	20.12.2004	11/017426
CN200580023268	A SYSTEM AND ARCHITECTURE FOR VIRTUAL PRIVATE NETWORKING	Grant	45193	CN	31.05.2005	200580023268
EP1769377	A SYSTEM AND ARCHITECTURE FOR VIRTUAL PRIVATE NETWORKING	Publication	45193	EP	31.05.2005	5751741.9
JP4657294	A SYSTEM AND ARCHITECTURE FOR VIRTUAL PRIVATE NETWORKING	Grant	45193	JP	31.05.2005	2007-514186
US7730294	A SYSTEM AND ARCHITECTURE FOR VIRTUAL PRIVATE NETWORKING	Grant	45193	US	04.06.2004	10/861226
CN101053201	IP CAROUSELS FOR BANDWIDTH USAGE OPTIMIZATION IN DVB-H IP ENCAPSULATORS	Publication	45236	CN	27.10.2005	200580037510
EP1807970	IP CAROUSELS FOR BANDWIDTH USAGE OPTIMIZATION IN DVB-H IP ENCAPSULATORS	Publication	45236	EP	27.10.2005	5809969.8
US7729385	IP CAROUSELS FOR BANDWIDTH USAGE OPTIMIZATION IN DVB-H IP ENCAPSULATORS	Grant	45236	US	01.11.2004	10/976851
CN200580044792	MOBILE CONFERENCING	Grant	45410	CN	26.10.2005	200580044792
EP1810445	MOBILE CONFERENCING	Publication	45410	EP	26.10.2005	5819781.5
IN3635/DELNP/2	MOBILE CONFERENCING	Local filing	45410	IN	26.10.2005	3635/DELNP/2
KR895028	MOBILE CONFERENCING	Grant	45410	KR	26.10.2005	2007-7012367
US8150920	MOBILE CONFERENCING	Grant	45410	US	01.11.2004	10/978861
EP1869929	A METHOD FOR PACKET TRAFFIC OPTIMIZED RADIO RESOURCE MANAGEMENT	Local filing	46645	EP	12.04.2006	6727470.4
US7630338	A METHOD FOR PACKET TRAFFIC OPTIMIZED RADIO RESOURCE MANAGEMENT	Grant	46645	US	12.04.2006	11/403695
APAP/P/08/00440	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Allowance	46841	AP	29.09.2006	AP/P/08/00440
CN101278589	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Publication	46841	CN	29.09.2006	200680036107
EP1938648	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Publication	46841	EP	29.09.2006	6808913.5
IN1917/DELNP/2	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Local filing	46841	IN	29.09.2006	1917/DELNP/2
JP2009-	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Publication	46841	JP	29.09.2006	2008-531818
KR992075	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Grant	46841	KR	29.09.2006	2008-7007485

PK1286/2006	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Filing	46841	PK	29.09.2006	1286/2006
TW95136469	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Filing	46841	TW	29.09.2006	95136469
US20070070949	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Pending	46841	US	28.09.2006	11/540940
US20070238525	EVENT TRIGGERED MICRO AND MINIGAMES	Pending	51553	US	30.03.2006	11/393588
EP2011311	UTILIZING PRESENCE SERVICE FOR SERVICE DISCOVERY IN MOBILE BROADCAST	Abandoned	52014	EP	05.04.2007	7754821.2
US20070240189	UTILIZING PRESENCE SERVICE FOR SERVICE DISCOVERY IN MOBILE BROADCAST	Abandoned	52014	US	06.04.2006	11/398757
US7869837	MOBILE IP NODE LOSSLESS TRANSITION FROM IDLE TO AWAKE STATE	Grant	52069	US	13.12.2006	11/610436
US8112075	HARQ-AWARE CQI REPORTING	Grant	52716	US	23.03.2007	11/728265
EP1873998	USER PRIVACY: PROTECTING IMSI FROM ACTIVE ATTACKERS IN 3GPPLTE (REL 8)	Publication	53394	EP	22.06.2007	7252548.8
US20080002829	USER PRIVACY: PROTECTING IMSI FROM ACTIVE ATTACKERS IN 3GPPLTE (REL 8)	Pending	53394	US	27.06.2007	11/769621
US20080153510	UPDATING SERVER WHEN NO TAG EXISTING	Pending	54228	US	22.12.2006	11/615327
CN101653023	I-HSPA ADAPTER IDENTIFICATION IN SGSN	Publication	56536	CN	31.03.2008	200880010870
EP2132915	I-HSPA ADAPTER IDENTIFICATION IN SGSN	Local filing	56536	EP	31.03.2008	8736805.6
IN5874/CHENP/2	I-HSPA ADAPTER IDENTIFICATION IN SGSN	Publication	56536	IN	31.03.2008	5874/CHENP/2
US7907969	I-HSPA ADAPTER IDENTIFICATION IN SGSN	Grant	56536	US	30.03.2007	11/731127
US20080256627	COPYRIGHTS WITH POST-PAYMENTS FOR P2P FILE SHARING	Pending	56542	US	13.04.2007	11/734863

### Essential Cellular Patents

Patent / Publication	Standard Organization	Standard	Title	Status	Family	Country	Filing Date	Filing Number
US5722074	ETSI ARIB	WCDMA T63	SOFT HANDOFF IN A CELLULAR TELECOMMUNICATIONS SYSTEM	Grant	2314	US	24.09.1993	08/619701
US5805301	ETSI	GSM	FACSIMILE TRANSMISSION IN A MOBILE COMMUNICATION SYSTEM	Grant	2390	US	06.03.1996	08/732467
EP740875	ATM	ATM	METHOD AND SYSTEM FOR CONTROLLING STATISTICALLY MULTIPLEXED ATM BUS	Grant	2704	EP	13.1.1995	95905653.2
US6295286	ETSI	GSM	A METHOD FOR INDICATING A MULTI-SLOT CHANNEL IN A TDMA RADIO SYSTEM	Grant	7158	US	24.11.1995	08/836969
US6081534	ETSI	GSM, DECT	IMPLEMENTATION OF MUTUAL RATE ADAPTATIONS IN DATA SERVICES BETWEEN GSM AND	Grant	7164	US	06.06.1996	08/659590
US7420948	ETSI	GSM	NEW 14.4 KBIT/S SERVICE FOR GSM	Grant	7272	US	09.09.2005	11/221797
US6859447	ETSI ARIB	WCDMA T63	A BASESTATION CONTROLLER (BSC) BASED ON AN ATM SWITCH	Grant	7794	US	30.12.1997	09/607065
US6456237	ETSI ARIB	GSM, WCDMA T63	TRACKING OF REAL TIME AND OBSERVED TIME DIFFERENCE VALUES IN TIME	Grant	7882	US	30.03.1999	09/677114
US6393121	ETSI ITU	GSM Q1238.2	SCP.N OHJAAMAN LISÄVALINNAN KERÄÄMISEN MONIPUOLISTAMINEN	Grant	14028	US	26.10.1998	09/331874

US7792092	IETF	IETF	Data transmission method and a network element	Grant	14268	US	23.12.1999	09/868819
US7072358	ETSI ARIB	GSM, WCDMA T63	TRANSMISSION AND INTERCONNECTION METHOD	Grant	14734	US	31.05.1999	09/997200
US7242933	ETSI ARIB	LTE, WCDMA T63	RELOCATION OF RRC PROTOCOL IN SRNS RELOCATION	Grant	15038	US	13.09.2000	10/088452
EP1221212	ETSI ARIB	GSM, WCDMA T63	SYNCHRONIZATION OF PROTOCOL REMAPPING	Grant	15081	EP	11.10.1999	99950691.8
US7043246	ETSI ARIB	GSM, WCDMA, SAE T63	PROVIDING MT SERVICES FOR UNREGISTERED SUBSCRIBERS IN R2000IM NETWORKS	Grant	15483	US	04.01.2002	10/035339
US7155173	IETF	IETF	CROSS SESSION DICTIONARY FOR COMPRESSION OF TEXT-BASED MESSAGES	Grant	17233	US	17.12.2001	10/024412
US7218618	IETF	IETF	GPRS/UMTS GGSN/IGSN ACTING AS MOBILE IP PROXY	Grant	17242	US	19.07.2002	10/198599
US6331978	ITU-T	G.7041/Y.1303	GENERIC LABEL ENCAPSULATION PROTOCOL FOR CARRYING LABEL SWITCHED PACKETS	Grant	17315	US	09.03.1999	09/264758
US7558283	ARIB	T64(cdma2000)	CORRELATION OF SERVICE INSTANCE, R-P CONNECTION AND RADIO CONNECTION IN	Grant	17746	US	02.03.2005	11/071492
US6408063	ETSI ARIB	GSM, WCDMA T63, T64	A SUBSCRIBER RELATED INFO TO B-SUBSCRIBER BEFORE CALL IS ANSWERED	Grant	18052	US	05.10.1999	09/412926
US6973060	ETSI	GSM	ROTATING SCH TRANSMISSION	Grant	18319	US	03.01.2000	09/476500
US7126940	ETSI	GSM	ASSOCIATION OF TLLI AND SCCP CONNECTION TO ENABLE FAST DEPLOYMENT OF LCS IN	Grant	18965	US	23.10.2001	10/004084
US7724720	ETSI ARIB	WCDMA T63	METHOD FOR TRANSMITTING A SEQUENCE OF SYMBOLS	Grant	24835	US	17.07.2006	11/457879
US6901046	ETSI ARIB	WCDMA T63, T64	METHOD AND APPARATUS OF SCHEDULING AND MODULATION/CODING SELECTION FOR	Grant	25862	US	26.12.2001	10/025609
US7050406	ETSI ARIB	WCDMA T63, T64	METHODS AND APPARATUS OF CHANNEL ALLOCATION WITH CODE DIVISION MULTIPLEXING	Grant	25975	US	12.12.2003	10/735266
US7920499	OMA	OMA	INDICATING INITIAL FLOOR STATE IN SDP	Grant	40217	US	26.03.2004	10/809710
US7333793	ETSI	GSM	PS HANDOVER MECHANISM - LLC SYNCHRONISATION	Grant	40284	US	05.04.2004	10/816931
AU2005212893	ETSI ARIB	WCDMA T63	HSDPA HS-DPCCH DUTY CYCLE	Grant	40312	AU	14.02.2005	2005212893
EP1779697	ETSI ARIB	WCDMA T63	SCHEDULING NODE B CHANGE DURING SHO	Publication	40609	EP	12.08.2005	5772926.1
US20090156215	ETSI ARIB	GSM, WCDMA T63	LACK OF CHANNEL CODINGS IMPLIES A HANDOVER	Pending	40773	US	27.04.2007	11/666578
EP1842386	ETSI	GSM	DOWNLINK DATA OPTIMIZATION FOR PS HANDOVER	Publication	40985	EP	08.12.2005	5824117.5
US20070070949	ETSI ARIB	WCDMA T63	PSI/SI INDICATOR AND TRANSFERING PSI/SI BLOCKS IN THE TRANSPARENT CONTAINER FOR	Pending	46841	US	28.09.2006	11/540940