
Innography Boot Camp 2012
Austin, TX

Tony Kulesa
Agenda

- About ThinkFire
- What Rights Do Patents Provide?
- Famous Patent Cases
- IP Valuations – The Perfect Storm
- IP Sales Activity And Soaring Valuations
- Mobile Patent Wars
- What’s China Doing?
- Profits In IP
- How Can I Help?
- Q&A
ThinkFire – Who We Are and What We Do

- ThinkFire recently celebrated its 10th year in business on July 16, 2011
- ThinkFire is a fully integrated team of business strategists, technologists, lawyers, and market analysts with an in-depth background in all aspects of IP, specializing in communications, electronics, and software technology
- ThinkFire’s clients include Fortune 1000 companies such as HP, Oracle, and Nokia, Private Equity firms, law firms, smaller companies and sometimes individual inventors
2011 proved to be a watershed year for intellectual property directed to mobile computing technologies. Patents have evolved from being an intangible asset with little measurable return to a make or break strategic company asset. During this talk, we will highlight some of the recent IP events and discuss why these important strategic assets deserve special attention, how the assets may be viewed by your company and how you can help your company further its IP objectives.
The Way Things Used to Work: The Cross-License

- Patent litigation was largely driven by one operating company seeking marketplace leverage over another.

- The defendant’s strongest defense was often comprised of a counter-suit or threat of counter-suit based on the defendant’s own patent portfolio.

- Accordingly, many suits were settled through a combination of monetary payments and patent cross-licensing, where the cross-licensing arrangement often tended to reduce the amount of monetary payments.
Big Settlements and Awards of the Past Decade Got Big Attention

- **NTP v. RIMM**
  - RIMM pays $612M in 2006 settlement
  - Judge threatened an injunction against the BlackBerry network

- **Lucent v. Microsoft**
  - Lucent was awarded $1.53B in 2007 suit against Microsoft for infringing on MP3 and audio patents
  - After a post trial motion the case was dismissed based on co-ownership of one patent and noninfringement of the second

- **Qualcomm v. Broadcom**
  - QCOM pays $891M in 2009 settlement
  - Broadcom was an IP “have-not”, but strategically acquired patents from Intermec and Unova for counter-assertion against QCOM

- **TiVo v. Dish Network**
  - Dish agreed to pay $500M to settle litigation associated with Time Warp patent in 2011

*Source: Various press releases*
The Perfect Storm Scenario for IP Valuations

- Driving factors for the high valuations for Mobile IP
  - Multiple buyer categories
  - Convergence of technology
  - Market disruption: new entrants in market with little IP
IP Buyers All Competing for the Same Assets

- **Strategic Buyers:**
  - Large cash positions enable buying large and small portfolios
  - Litigation risk – purchase to remove from enemies and Non Practicing Entities (NPEs)
  - Strategic value – purchase to enable business strategy

- **Investors or NPEs:**
  - Buy and aggregate patents cheaply seeking a large Return on Investment
  - Licensing value of IP
  - Litigation value of IP

- **Patent Defensive Funds:**
  - Group purchase to minimize cost to members; willingness to pay is proportional to members litigation exposure
Convergence of Technology

A new entrant into smartphone would easily infringe >5000 patents

- **Standards**
  - 3G (WCDMA), 4G (LTE), WiFi, Bluetooth, NFC, MPEG, H.264, JPEG, Ethernet, USB, Encryption, VoIP, AMR – speech coding, DDR memory, HTML/XML, etc.

- **Hardware**
  - Touch display, power management, battery, microprocessors, digital signal processing, power amplification, digital camera, etc.

- **Software**
  - Operating system, user interface, applications, cloud computing, speech recognition, etc.

- **Design, look and feel**
Market Disruption

- New entrant into the mobile phone space
- Very little IP of their own
- There is no freedom to operate without infringing others’ patents
- Solution: bulk up . . .
Bulk Up and Acquire Patents and Lots of Them!

Google's $12.5 Billion Gamble
Web Giant Pays Big for Motorola's Phone Business, Patents; Risks Alienating Allies

Consortium led by Apple buys Nortel's patents for $4.5 billion

By Philip Elmer-DeWitt July 1, 2011: 5:55 AM ET
Example: Let's Look at Some New Smartphone Entrants and Their IP Positions

Smartphone Manufacturer US Market Share: Q3-2011

Source: Nielsen
## How many leading smartphone manufacturers owned LTE IP in 2009?

<table>
<thead>
<tr>
<th>Company</th>
<th>Families</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>InterDigital Technology Corp.</td>
<td>249</td>
<td>23%</td>
</tr>
<tr>
<td>Qualcomm Inc.</td>
<td>187</td>
<td>17%</td>
</tr>
<tr>
<td>Huawei Technologies</td>
<td>147</td>
<td>14%</td>
</tr>
<tr>
<td>Nokia Corporation</td>
<td>126</td>
<td>12%</td>
</tr>
<tr>
<td>LG Electronics Inc.</td>
<td>92</td>
<td>9%</td>
</tr>
<tr>
<td>Samsung Electronics Co., LTD</td>
<td>64</td>
<td>6%</td>
</tr>
<tr>
<td>Ericsson</td>
<td>49</td>
<td>5%</td>
</tr>
<tr>
<td>Nortel Networks Ltd.</td>
<td>40</td>
<td>4%</td>
</tr>
<tr>
<td>ETRI</td>
<td>35</td>
<td>3%</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>26</td>
<td>2%</td>
</tr>
<tr>
<td>NEC Corporation</td>
<td>19</td>
<td>2%</td>
</tr>
<tr>
<td>Nokia Siemens Networks</td>
<td>15</td>
<td>1%</td>
</tr>
<tr>
<td>Sony Corporation</td>
<td>12</td>
<td>1%</td>
</tr>
<tr>
<td>Siemens</td>
<td>8</td>
<td>1%</td>
</tr>
<tr>
<td>T-Mobile International AG</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Infineon Technologies</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Alcatel-Lucent</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Gemplus</td>
<td>1</td>
<td>0%</td>
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<tr>
<td>Icera Inc.</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>iCODING Technology Inc.</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Freescale Semiconductor</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>1082</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: ThinkFire*
Why Standards Essential Patents are Important

- Infringement is a given if your product is compliant with an industry standard

- Evidence of use is easy to find and it does not require extensive product reverse engineering

- Alternatives to a patent are not viable since the product must comply to the standard

- Royalties and damages are easily estimated because standards based products are forecast
Recent IP Sales Activity in the Smartphone Patent Wars

- Nortel’s 6000 patent assets: Rockstar bid of $4.5B in June 2011 swamps Google’s initial bid of $900M; Rockstar is a consortium of Apple, EMC, Ericsson, Microsoft, RIM, and Sony.

- InterDigital, with 8800 patent assets, put the company up for sale through a closed auction in July 2011; analyst estimated the value at $2-3B. No buyer found.

- Kodak announced it is selling 1100 digital imaging patents in July 2011; analyst estimate the value at $2-3B. Tied up in bankruptcy courts.

- Google announced Motorola Mobility, with 21,000 patent assets, acquisition with offer of $12.5B in Aug 2011. DoJ approved, other government approvals pending.

- Sterling Partners Acquires MOSAID Technologies for $590M in Oct 2011; key part of deal Nokia’s 2000 wireless patent assets.

- Novell sells 882 patent assets for $450M to CPTN Holdings, a consortium of Microsoft, Apple, EMC, and Oracle in Apr 2011.

- Acacia buys 230 issued patents for $160M in Jan 2012.

- IPWireless currently selling 97 patent families directed to 3GPP standards.

Source: various press releases
The Nortel Deal Sent Wireless Patent Values Soaring

- The (over) simple math patent owners apply using the Nortel deal as the benchmark.

- Initial stock market reaction for a company with a significant patent portfolio deemed essential to wireless standards was the company’s market capitalization was now increased by some portion of the value of the patent portfolio.

- Some simple examples of how investors views the IP calculus:

<table>
<thead>
<tr>
<th>Company</th>
<th>patents</th>
<th>x$742,647</th>
<th>valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorola</td>
<td>17,000</td>
<td>x$742,647</td>
<td>$12.5B</td>
</tr>
<tr>
<td>Nortel Networks™</td>
<td>6,000</td>
<td>x$742,647</td>
<td>$4.5B</td>
</tr>
<tr>
<td>Nokia</td>
<td>30,000</td>
<td>x$742,647</td>
<td>$22.3B</td>
</tr>
<tr>
<td>Alcatel-Lucent</td>
<td>27,900</td>
<td>x$742,647</td>
<td>$20.7B</td>
</tr>
<tr>
<td>RIM</td>
<td>11,000</td>
<td>x$742,647</td>
<td>$8.2B</td>
</tr>
<tr>
<td>InterDigital®</td>
<td>8,800</td>
<td>x$742,647</td>
<td>$6.5B</td>
</tr>
</tbody>
</table>
Why Have US International Trade Commission Actions Grown in Popularity?

What’s the Plaintiff’s End Game?

- US Federal District Courts
  - After Ebay v. MercExchange injunctions are unlikely outcomes
  - Main form of relief is power to award monetary damages
  - Many rules regarding jurisdiction, rules of evidence, etc.

- US International Trade Commission
  - Section 337 of the Tariff Act of 1930 makes unlawful any unfair method of competition including patent infringement
  - The ITC can impose an injunction at US borders, but not power to award monetary damages
  - ITC judges know technology and deal with IP cases all the time and quickly

Apple vs. Nokia – Settled Like Most Usually Do

- After a two year long battle in June 2011, Apple settled with Nokia and is estimated to pay Nokia an up-front payment of $715M plus ongoing royalties.

- The dispute was not about essential patents which are licensed under FRAND terms. The patents in suit were non-essential patents directed to touch screens and user interface.

- Nokia asserted 46 patents in total between Delaware Federal District Court and at the US International Trade Commission (ITC). And, Apple counter-asserted patents also.

Source: various press releases
iOS vs. Android – High Stakes

Apple vs. Samsung
- Apple first filed a suit against Samsung based on the look and feel of the Galaxy phone (4/15/11). Samsung then filed a counter suit against Apple for patent infringements (4/21/11). The battle has been ongoing and Australian (8/2/11), German (8/9/11), and Dutch (8/24/11) courts have ruled for and against injunctions against Samsung Galaxy products.

Apple vs. HTC
- Apple sued HTC through the ITC for infringing on 20 patents directed to user interface, and smartphone architecture in March 2011. The case is still pending.
- HTC announced a bid for S3 Graphics which was suing Apple also through the ITC. On Nov. 22, 2011 The ITC ruled Apple does not infringe the S3 patents.
- HTC initiated a suit in Delaware in Sep. 2011 after it acquired nine patents from Google which it acquired from Motorola, Openwave, and Palm. The case is still pending.

Apple vs. Motorola Mobility
- 42 patents-in-suit; 24 Apple and 18 MMI patents
- In Nov. 2011, Motorola won an injunction against Apple in Germany and Apple deactivates iCloud and “push notification”. Apple lost ITC ruling in March and is appealing. There have been many other court rulings ...

Source: Various press releases
Microsoft Gets in the Game, Not With Market Share, But With Licensing Activity

- Brad Smith, MSFT General Counsel, announced MSFT licensed 53 percent of the Android market through Q2-2011.

- HTC is reported to pay MSFT $5 for every HTC phone running Android. Others expected to pay $7.50 to $12.50 per device. [Source: Citi analyst Walter Pritchard]
What’s China Doing to Not Get Left Behind?

- Two for one patent rebates
- New patent pool formation
  - 30 patent pools will be formed to enable simplified licensing to Chinese IP

  “The system will include guidance, analysis and patent warnings for Chinese companies doing business overseas.”

Source: [www.chinadaily.com](http://www.chinadaily.com), WIPO
## IP has High Profit Margins

<table>
<thead>
<tr>
<th>Business Segment</th>
<th>Sale Price</th>
<th>Profit Margin</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>$250</td>
<td>40%</td>
<td>$100</td>
</tr>
<tr>
<td>Licensing</td>
<td>$111</td>
<td>90%</td>
<td>$100</td>
</tr>
</tbody>
</table>
Elite (Patent) Manufacturers Exist Across a Wide Spectrum of Products and Revenues

- Qualcomm – generated $4B in 2008 by licensing its CDMA patents; 89% margins
- IBM – for many years now, IBM generates >$1B per year in licensing fees
- Philips – generates >$500M per year in licensing fees. This was nearly 100% of the earnings for the Consumer Electronics Business
- Rambus – reported Q3-2011 revenue of $100M, $91M is licensing income
- Universal Display Corp. – reported Q3-2011 of $9.9M, $4.6M is licensing income

Source: Various financial statements
How Can I Help My Company Achieve IP Objectives?
Patent Quality vs. Quantity

- Filing Quality Patents

  - Prior art searching (*under legal direction*).

  - Write the claim to the infringing product.

  - Think about the product and how it may evolve over time and make sure the different claims cover the possible evolution of the technology. Write the claim directed to the infringing product.

  - Develop a process to review disclosures, review patent specs, patent claims, your patent attorney fit for the technology (e.g. SW claims experience), competitors applications and patents.
How Can I Help My Company with IP?

- Perform a patent-to-product mapping
- Patent abandonment reviews - save on maintenance fees
- Build a product/technology taxonomy and categorize your patents
- Develop patent tier ranks and assign your patents to the tiers
- Gap analysis
- Identify stranded assets
- Benchmark and grade your patent claims against best in class
- Encode all this information into a searchable patent database
Tools, Techniques, and People

Master the Innography platform

- Portfolio comparisons and benchmarking
- Patent landscaping & licensing opportunity identification
- Setup notification updates for your saved queries
- Counter assertion analysis
- Licensing opportunity identification
- Citation and semantic analysis
- Exporting to Excel
About the Speaker

Tony Kulesa
VP – Advisory Services

Role at ThinkFire

- Tony supports ThinkFire’s IP advisory services and helps clients develop IP business strategies, perform due diligence on investment opportunities, evaluate and value licensing and brokering opportunities, and develop defensive licensing strategies and tactics.

- Tony has worked extensively in the areas of wireless communications and semiconductor industries, including engagements involving determining patent essentiality to 3G/4G wireless standards.

- His work at ThinkFire also includes managing development of software tools for automated patent categorization, patent ranking, and IP database management.

Prior Experience

- Prior to working at ThinkFire, Tony spent 20 years in various silicon IP product development and technical management roles at companies, including Bell Labs, TRW, and Conexant, and was the founder of XIT Tech Inc., a technology consulting firm.
THANK YOU!

Q&A

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