Evolution of Telecom Patent Licensing & Litigation

Mobile Voice Conference
March 14, 2012

Presented By:
Brent Bersin
IPFC Corp.
Evolution Of Telecom Standards
Rise of Smartphones

- With the increasing number of smartphones being sold, patents related to features, operating systems, data and voice management, and touch screen user interaction have become increasingly important.

- Newer smartphone technologies (and their related patents) are emerging, such as speech recognition (e.g., “Siri”).
The September 2010 issue of *les Nouvelles* (Journal of the Licensing Executives Society International) discussed royalty rates for essential patents for the Long Term Evolution Advanced (LTE) mobile communication standard.

LTE, considered an upgrade to WCDMA, provides “an enhanced radio interface and all-IP networking technology.”

In an effort to add transparency to the royalty rates that handset manufacturers may be required to pay related to LTE, a few companies have made public announcements identifying the rates they may charge on handsets that use the LTE standard.

A summary of published LTE royalty rates, and the number of patents the respective companies have declared as essential to LTE, is shown in the table below:

<table>
<thead>
<tr>
<th>Company</th>
<th># of Essential LTE Patents</th>
<th>Royalty Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcatel–Lucent</td>
<td>9</td>
<td>2.0%</td>
</tr>
<tr>
<td>Ericsson</td>
<td>146</td>
<td>1.5%</td>
</tr>
<tr>
<td>Huawei</td>
<td>182</td>
<td>1.5%</td>
</tr>
<tr>
<td>Motorola</td>
<td>16</td>
<td>2.25%</td>
</tr>
<tr>
<td>Nokia Corp.</td>
<td>142</td>
<td>1.5%</td>
</tr>
<tr>
<td>Nokia Siemens</td>
<td>32</td>
<td>0.8%</td>
</tr>
<tr>
<td>Nortel</td>
<td>46</td>
<td>1.0%</td>
</tr>
<tr>
<td>Qualcomm</td>
<td>350</td>
<td>3.25%</td>
</tr>
<tr>
<td>ZTE</td>
<td>–</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>923</strong></td>
<td><strong>14.8%</strong></td>
</tr>
</tbody>
</table>

In mid to late 1980s, European mobile handset and infrastructure equipment manufacturers (Ericsson, Nokia, Siemens, Alcatel) plus U.S. based Motorola (“Big Telecom”) jointly developed what would become the GSM/TDMA mobile standard.

The European companies took a traditional approach to sharing their inventions to the standard.

Motorola took more aggressive approach and forced cross-licenses that gave it access to other technologies and prevented other U.S. and Asian companies from moving into European market.
Wave 2: Qualcomm Shakes It Up

- In 1990s, Qualcomm developed CDMA to compete with GSM/TDMA standard developed by Big Telecom

- Qualcomm fought to get CDMA included into 3G standard and made peace with many of the Big Telecom players...except Nokia

- Qualcomm licensed its CDMA patents to Big Telecom for a 4%-5% royalty rate, however pressures from declining phone prices and competitors are forcing this rate lower

- Qualcomm ultimately sold its handset and infrastructure equipment business to focus on licensing its patents and chipsets
In mid-2000s, Qualcomm faced several ITC actions brought by likes of Broadcom, Nokia and Tessera.

Qualcomm and Nokia have had a contentious relationship over the last 2 decades, but are currently collaborating on new products.
Wave 3: Rise Of The NPEs

- 2000s saw wave of non-practicing entities (NPEs)
  - Intellectual Ventures, Acacia, Rembrandt, etc.

- Contribute to rise in number of Telcom decisions
  - 2001–2005 = 22 (Industry rank = 9)
  - 2006–2010 = 38 (Industry rank = 8)

- Telcom has highest industry median damage award from 1995–2010 at $25 million, but...
  - NPE median award = $8 million
  - Practicing entity median award = $50 million
Some recent jury damages awards to NPEs involving asserted telecom patents:

  - Mobile device location
  - $2.8 million jury award

  - Internal antenna
  - $23.1 million jury award

- **Personal Audio, LLC v. Apple Inc. (E.D. TX., 2011)**
  - Playlist / Navigation on iPhones / iPods
  - $8 million jury award
Handset makers are getting more aggressive towards each other, forcing each to take defensive measures

Patent cooperation versus patent litigation?

Some recent case examples:

- **Apple Inc. Inc. v. HTC Corp. (Del., 2010)**
  - Apple suing HTC related to mobile phone operating system patents

  - Apple suing Samsung over various phone patents

- **Motorola Mobility Inc. v. Apple Inc. (S.D. FL., 2012)**
  - Motorola suing Apple over patents related to iPhone 4S and iCloud

  - Oracle suing Google related to use of Java programming patents in Android operating system
Wave 4: Practicing Entity Offensive

- Consortium of companies (Apple, RIM, Microsoft, Ericsson, EMC, and Sony) attempting to buy more than 6,000 patents from Nortel Networks for $4.5 billion

- Google recently received regulatory clearance to buy Motorola Mobility with its more than 17,000 patents and manufacturing capabilities for $12.5 billion

- Is “Siri” functionality in iPhone 4S tipping point of patent litigation increasingly involving speech recognition technologies?
35 U.S.C. §284 of U.S. Patent Law addresses the damages remedies available for claims of patent infringement and states that:

“Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer”
Under 35 U.S.C. §284, economic damages are focused on losses suffered by the patent owner, rather than the gains received by the infringer.

If patent is found valid and infringed, the patent owner is legally entitled to a minimum level of monetary relief or compensation (i.e., reasonable royalties) for the unauthorized use (i.e., infringement) of its patented invention.

The types of patent damages available under 35 U.S.C. §284 are divided into two key categories:

- (i) lost profits; and
- (ii) reasonable royalties
Lost profits refer to the profits on sales forgone by a patent owner due to unlawful competition from infringing products sold by an infringer.

The concept of lost profits assumes that the parties are direct competitors in the same industry and market, with substantially similar product offerings and target customers.

Panduit Corp. v. Stahlin Bros. Fibre Works, Inc. is the seminal case, still relied upon today, which established a four-prong “but for” test necessary for a patent owner to prove lost profits damages known as the Panduit Factors:

1. Demand existed for the patented (infringing) product
2. Acceptable non-infringing substitutes were not available
3. The patent owner possessed the necessary manufacturing and marketing capability
4. The quantification of the amount of profit that the patent owner would have made
In many current patent lawsuits, a patent owner does not practice the patent-in-suit or does not otherwise sell products which compete with the infringing products sold by the infringer (e.g., NPEs).

In such cases, the patent owner is not entitled to a claim of lost profits and may seek compensation in the form of reasonable royalty damages.
A reasonable royalty is the monetary compensation that would have been agreed upon in a hypothetical, arms-length negotiation between a willing licensor (patent owner) and a willing licensee (infringer) at the time of first infringement for a license to use the patented invention.

In determining a reasonable royalty, the parties to the hypothetical negotiation are required to assume that patent-in-suit is valid, infringed, and enforceable.

The hypothetical negotiation is assumed to have occurred at the time of first alleged infringement – this is the first date on which each infringer made, used, sold, or offered for sale the infringing products after issuance of the patent-in-suit.

A reasonable royalty analysis focuses on the respective economic and bargaining positions of the patent owner and the infringer at the time of the hypothetical negotiation, and the likely outcome given their respective bargaining positions and considerations.
Evolution of Patent Damages

- Federal District Courts and the Court of Appeals for the Federal Circuit (“CAFC”) are raising the bar for the calculation of patent infringement damages:
  - Death knell apparently sounded for use of “25% Rule of Thumb” in determining reasonable royalties
  - Increased scrutiny on comparability and use of industry patent licenses and patent licenses of the parties to determine reasonable royalties
  - Questions remain about use and admissibility into evidence of settlement agreements related to subject patents – whereas settlement agreements were previously inadmissible
Evolution of Patent Damages

- Higher burden for application of Entire Market Value Rule ("EMVR") to determine royalty base:
  - Patented invention drives demand for sale of entire product; and/or
  - Patented invention is functionally inseparable from entire product

- Emphasis on *apportionment* to incremental benefit derived from patented invention

- In telecom patent matters, seeing a transition to per unit running royalties from a running royalty based on percentage of sales

- Defendants now often argue for lump sum royalty payment (i.e., “one and done”) as opposed to traditional running royalty structure
IPFC is an independent consulting firm that provides corporate, individual, and law firm clients with financial, economic, valuation, damages quantification/assessment, and expert witness services for various business purposes and in the context of intellectual property and commercial disputes.