

STRENGTH IN LTE INNOVATION

Over the last two decades, wireless technologies have dramatically changed the way we live, work, and play. We have evolved from the early days of non-compatible regional analog systems with spotty localized coverage to more reliable digital CDMA and TDMA-based networks, many of which support worldwide roaming. We have moved from simple analog voice calls to text messaging and real-time access to rich multimedia content on the Internet. Bulky mobile telephones have morphed into sleek consumer electronics that feature crystal-clear displays and play music and videos. Today's applications may seem impressive, but we believe that we are only at the very beginning of the wireless revolution... and that LTE, the next major technology upgrade path selected by many operators, will be a key element of the future of wireless.

So, what exactly is LTE? LTE stands for “Long-Term Evolution,” an emerging wireless communications standard. Wireless communications standards are formal guidelines for engineers, designers, manufacturers, and service providers that regulate and define the use of the licensed radio frequency spectrum in conjunction with providing specifications for wireless communications products. A primary goal of the standards is to assure interoperability of products, marketed by multiple companies, built to a common standard. New standards – such as LTE - are typically adopted with each new generation of products and are often compatible with previous generations of the standards (for example, GSM and WCDMA).

The LTE standard is focused on substantially enhancing the over-the-air and network capabilities of current wireless handsets and infrastructure. Specifically, the LTE specification provides for various performance categories, with most initial deployments having peak data rates of up to 100 megabits per second (Mbps) in the downlink and up to 50 Mbps in the uplink. LTE also supports seamless handover with older network technologies such as GSM/EDGE, UMTS, and CDMA2000; as a result, LTE devices will eventually almost all be multimode.

With the proliferation of smartphones, tablets, and wireless laptops, operators worldwide are facing (or soon will have) substantial bandwidth issues. The explosive data demand is accelerating the need for these LTE systems to move traffic off the 3G UMTS networks. In fact, with mobile applications like Hulu, Netflix, Rhapsody, and YouTube, the “killer apps” are already here. This is in contrast to the introduction of 3G, which was rolled out at a slower pace, in part because there were no compelling applications driving the need for bandwidth.

Given these external market drivers, we expect that the market may transition to LTE rapidly, and that bodes well for InterDigital for several reasons:

1. From a value perspective, LTE devices are expected to be higher-priced;
2. From a core invention standpoint, LTE sits right in the sweet spot of our development roadmap; and
3. The majority of LTE devices will be multimode, and the devices will benefit from a long lineage of InterDigital innovations in 2G, 3G UMTS and LTE.

Since the earliest days of digital cellular, InterDigital's inventions have been at the core of mobile devices, networks, and services worldwide. As a long-standing contributor to the evolution of the wireless industry, we solved many of the industry's most critical and complex technical challenges, years ahead of market deployment. In fact, well before the first LTE standardization discussions in November 2004, InterDigital was already working to solve problems that would become relevant to efficient LTE deployments.

In that regard, technical challenges for LTE and our solutions can be grouped into two categories. The first includes critical digital cellular technologies - such as power control, radio resource management, interference mitigation, multi-channel arrangements, roaming and hand-off techniques, and control channels for efficient signaling - that InterDigital successfully tackled in 2G and 3G. Many of these elements are also mission-critical in LTE, and our engineers have developed, and will continue to develop, substantial technical enhancements and refinements in these areas, supporting faster, more reliable, more robust, and more efficient devices, networks, and services.

We have also been working for a long time on a second category of new technologies that will first be introduced in LTE, including: Multi-Input Multi-Output – commonly known as MIMO – technologies, multi-antenna configurations for reducing interference and increasing data rates; advanced OFDM, and SC-FDMA signaling techniques; Hybrid-ARQ for fast error correction; and schemes for discontinuous reception that improve handset battery life. These types of new technologies will support the development of more efficient wireless networks, a richer multimedia experience, and new mobile broadband capabilities for billions of users around the world.

Given the extensive work we have done in LTE, it is no surprise that InterDigital is routinely mentioned among the leading LTE innovators based on patent holdings. Indeed, we have read a number of reports trying to analyze the LTE patent landscape and opine on the relative strengths of companies in this area, and InterDigital is listed among the top players in each one. Of course, because these third party analysts apply a variety of methodologies in assessing various LTE patent holders and such analyses are understandably very complex and dynamic, we are not endorsing or adopting them at this time. However, one frequent source of data for these reports is the European Telecommunications Standards Institute (ETSI) IPR Database. ETSI produces globally-applicable standards for Information and Communications Technologies (ICT), including fixed, mobile, radio, converged, broadcast and internet technologies.

Many companies that participate in the ETSI standard-setting organization declare certain patents and/or patent applications to ETSI, which subsequently processes the data from these declarations and posts the listings of IPR to the ETSI IPR Database.

We recognize that this database presents difficulties in compiling, organizing and displaying records provided to ETSI by declarants. Therefore, we have prepared our own summary of certain information regarding the company's IPR declarations.

The appendix at the end of this document presents the number of U.S. patents, non-provisional patent applications and provisional patent applications declared to ETSI for UMTS and E-UMTS (what ETSI calls LTE) through October 27, 2010 by InterDigital's patent holding subsidiaries.

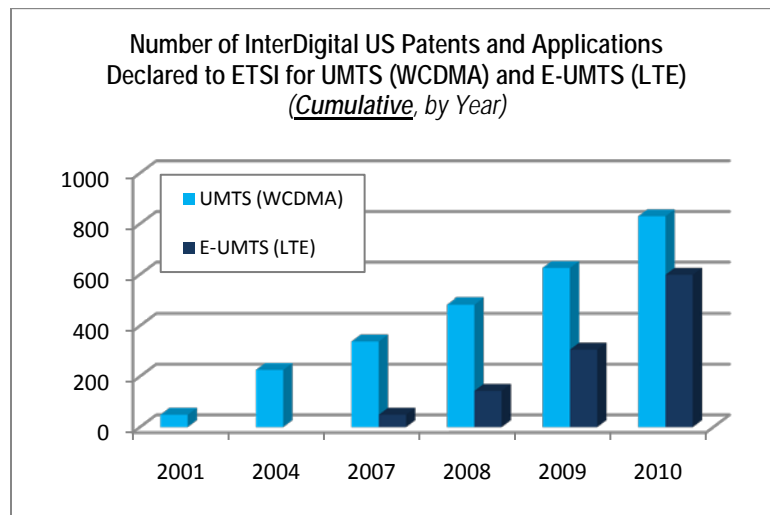
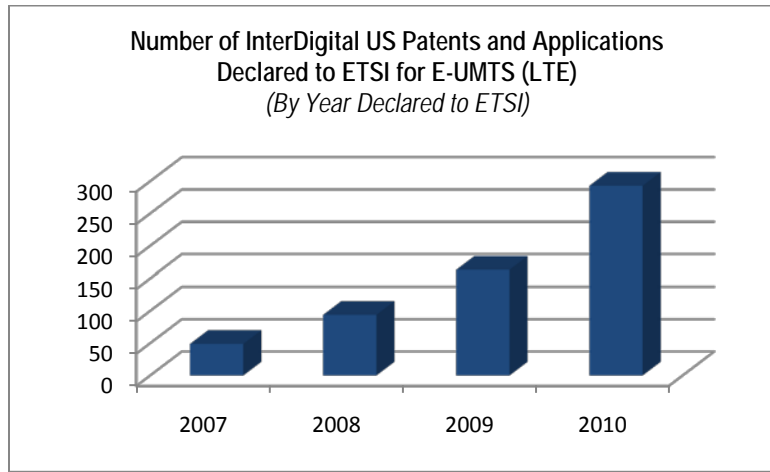
InterDigital has been an active participant and prolific inventor in LTE technologies. As of October 27, 2010, the company had declared approximately 600 U.S. patents and patent applications to ETSI for LTE, reflecting the creativity and productivity of our wireless engineers over the years. Consistent with the company's legacy of invention, our innovation in LTE continues and our technology roadmap reaches well beyond the current LTE standard. In fact, our "Next Generation Cellular" project targets advanced network topologies and spectrally-efficient air interface solutions for LTE-Advanced and beyond.

Finally, as noted above, we believe that LTE devices will predominately be multimode, incorporating 2G, 3G UMTS and LTE technologies. As the charts in the appendix show, in addition to our LTE declarations, through October 27, 2010, we have declared over 800 U.S. patents and patent applications to ETSI for 3G UMTS. For all these reasons, we enter the LTE licensing cycle with a high degree of confidence.

Ironically, LTE is expected to only bring temporary relief, as it is likely that it will ultimately be unable to meet increasing bandwidth requirements as even more consumers use new data-centric services and applications. Many industry analysts project a widening gap between user demand and system capacity, even after LTE is deployed. InterDigital is addressing the bandwidth crunch on several fronts. Our suite of technologies includes spectrum optimization, cross-network connectivity and mobility, and intelligent data delivery techniques – what we call bigger pipes, more pipes, and better pipes. We believe that all these initiatives will ultimately enable the future “Network of Networks,” the seamless integration of multiple communications networks, both wired and wireless, which intelligently and constantly connect people and things across a myriad of applications and locations.

APPENDIX

InterDigital U.S. Patents and Applications Declared to ETSI for LTE



Notes:

- 1) The data in the tables presented above reflect the U.S. (i) patents, (ii) non-provisional patent applications and (iii) provisional patent applications declared to the European Telecommunications Standards Institute ("ETSI") for the UMTS (including UMTS/CDMA) (3G) and E-UMTS (LTE) projects, as applicable, through October 27, 2010 by InterDigital's patent holding subsidiaries.
- 2) UMTS and E-UMTS stand for Universal Mobile Telecommunications System and Evolved Universal Mobile Telecommunications System, respectively.
- 3) Some patents and applications have been declared to ETSI by InterDigital for both UMTS and E-UMTS and therefore are included in both the UMTS and the E-UMTS data above.
- 4) The data above has been adjusted to reflect withdrawals of, and corrections made to, declarations of patents and applications as of October 27, 2010.
- 5) Certain of the patent and application data provided above by InterDigital may not correlate to the data available on the ETSI IPR Database as a result of differences in compiling, organizing and displaying declaration data. In addition, the patent and application data provided above may not be comparable to similar data provided by other third parties due to, among other things, differences in ETSI database search methodologies and applicable time periods.
- 6) The data in the tables above may include patents and applications that are directed to technology that is not, or may never be, deployed.
- 7) InterDigital's presentation of this data is not a statement of the essentiality of the patents and applications referred to herein, nor is this data a substitute for an independent evaluation of essentiality.