

## LTE/WiMax PATENT LICENSING STATEMENT (December 2008)

Throughout its existence, Qualcomm has led the wireless industry in the research and development (R&D) required to move from analog technology into second and third generation digital wireless technologies and beyond. These advances have been largely based upon Qualcomm's patented enabling inventions making it possible to apply code division multiple access (CDMA) technology to commercial cellular wireless networks. More recently, Qualcomm has been a leading developer of the technology enabling high speed data extensions of 3G networks and orthogonal frequency division multiple access (OFDMA)-based 4G systems and standards. As a result, Qualcomm owns an extremely valuable patent portfolio that includes patents that are essential, and others that are commercially useful, to all commercial wireless standards based upon CDMA and OFDMA-based systems and standards currently under development.

Qualcomm has had a long standing policy of broadly offering to license its standards essential patents for CDMA-based telecommunications standards on terms and conditions that are fair, reasonable, and free from unfair discrimination (FRAND), subject to reciprocity. FRAND is a well-established principle that appropriately balances the interests of patent holders to obtain a fair return on their innovations and those of implementers to obtain access to such innovations through good faith bilateral negotiations of licensing terms and conditions. FRAND embodies a flexible approach that allows individual licensors and licensees to negotiate the terms and conditions that are best suited to address their respective commercial objectives, and values standards essential patents through arms-length negotiations. Contrary to recent claims by a small number of manufacturers, FRAND does not, and never has, prescribed formulas for imposing cumulative royalty caps or proportional allocations of such royalty caps. Such formulas would arbitrarily limit the value of standards essential patents, discourage innovation, encourage the filing of marginal patents, complicate and delay the standardization process, and be impossible to implement in practice.

Consistent with these industry-accepted principles of FRAND, Qualcomm has established a fair and reasonable value for its essential 3G CDMA (e.g., cdma2000 (including 1x, 1x-EV-DO, and 1x-EV-DO Revisions A and B), UMTS, HSPA, HSPA+, TD-CDMA, and TD-SCDMA) patent portfolio by bilaterally negotiating licenses for such portfolio with more than 155 companies, making Qualcomm's patent portfolio the most widely licensed in the industry. Qualcomm's open and inclusive licensing program has promoted vibrant competition in the market by a large number of licensees selling 3G products that have reaped the benefits of Qualcomm's leading R&D investments, significant reductions in 3G product prices, and increases in consumer choice.

Unlike vertically-integrated companies that obtain a return on their R&D investments by profits from sales of products and equipment and primarily use their patent portfolios to protect these profit-generating businesses, Qualcomm relies heavily upon licensing revenues to obtain a fair return on its enabling innovations and to fuel its industry-leading R&D investments that continue to drive the industry forward with enhancements of 3G

CDMA standards and the development of OFDMA-based 4G standards. Qualcomm recognized many years ago that future high speed wireless data communications could utilize OFDMA and related technologies to increase wireless data rates. As a result, Qualcomm for many years has engaged in extensive OFDMA-related research and the development of OFDMA-based wireless broadband systems and standards. Further, in 2005 Qualcomm supplemented its R&D by acquiring Flarion, a recognized leader in OFDMA-related technology and commercial systems. Indeed, at the time of the acquisition, Flarion had already established a reputation as an industry leader in the development of OFDMA technology for wireless applications and deployed a commercial OFDMA-based system referred to as FLASH-OFDM. By combining the fundamental and extensive patented inventions developed as part of Qualcomm's and Flarion's early and continuing OFDMA-related R&D, Qualcomm today holds a leading and valuable patent portfolio that applies to all existing 4G standards under development, including 3GPP Long Term Evolution (LTE) and IEEE 802.16e/802.16m (WiMax).

Qualcomm has filed declarations with the European Telecommunications Standards Institute (ETSI) disclosing a significant portfolio of patents and patent applications that Qualcomm believes may potentially be essential to LTE, and has committed to ETSI and IEEE to offer licenses on FRAND terms and conditions (subject to reciprocity) to its patents that are and remain essential to the current LTE and WiMax standards under development. As was the case with Qualcomm's standards essential 3G CDMA patent portfolio, Qualcomm already has negotiated and signed *ex ante* licenses with a number of companies (including two major handset manufacturers) under Qualcomm's standards essential LTE and WiMax patents for products that implement LTE and/or WiMax but do not also implement 3G CDMA standards.

Consistent with the industry-accepted principles of FRAND described above and the value of Qualcomm's standards essential LTE and WiMax patent portfolios established through bilateral, arms-length negotiations culminating in Qualcomm's existing LTE/WiMax license agreements, Qualcomm expects that it will charge royalties for a license under its standards essential LTE patents and/or standards essential WiMax patents for complete, end user subscriber devices that implement LTE and/or WiMax standards, but do not implement any 3G CDMA standards, of approximately 3.25% of the wholesale selling price of each such device, subject to reciprocity and other standard terms and conditions. Qualcomm's expectation is based upon its understanding of the current LTE and WiMax standards under development and its existing patent portfolio. Qualcomm's current expectation may change in the future based on, among other things, changes to the LTE and/or WiMax standards and/or changes to Qualcomm's patent portfolio (e.g., acquisition of additional applicable patents).

In most cases, multi-mode LTE or WiMax devices that also implement 3G CDMA standards will be covered by Qualcomm's existing 3G CDMA license agreements. As previously communicated to the industry, with respect to multi-mode LTE/3G CDMA devices and WiMax/3G CDMA devices, Qualcomm expects that it will not charge a royalty rate on such multi-mode devices for use of both Qualcomm's standards essential LTE and/or WiMax patents and standards essential 3G CDMA patents that is greater than

Qualcomm's standard 3G CDMA royalty rate, subject to certain standard terms and conditions.

Although Qualcomm has previously disclosed its licensing terms and conditions for its standards essential LTE and WiMax patents to a large number of wireless operators and equipment vendors, Qualcomm is providing this statement to further increase the level of transparency to the industry regarding the potential patent licensing costs for end user subscriber devices that implement LTE and/or WiMax.

Qualcomm encourages all owners of standards essential LTE and WiMax patents that intend to seek royalties for licenses to such patents to voluntarily provide the industry with similar transparency into their expected royalty rates and other terms and conditions, including whether or not their royalty rates for 3G CDMA standards essential patents and royalty rates for LTE/WiMax essential patents will be cumulative for multi-mode LTE/3G CDMA devices and WiMax/3G CDMA devices.