

IN THE  
**UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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HTC CORPORATION, HTC AMERICA, Inc.  
ZTE CORPORATION, and ZTE (USA), Inc., Petitioners,

v.

CELLULAR COMMUNICATIONS EQUIPMENT LLC,  
Patent Owner.

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U.S. Patent No. 8,457,676 B2  
Issued: June 4, 2013  
Inventor(s): Juergen Michel et al.  
Title: POWER HEADROOM REPORTING METHOD

*Inter Partes* Review No. \_\_\_\_\_

**PETITION FOR *INTER PARTES* REVIEW OF  
U.S. PATENT NO. 8,457,676 B2 UNDER 35 U.S.C. §§ 311-319  
AND 37 C.F.R. §§ 42.1-.80, 42.100-.123**

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## I. INTRODUCTION

U.S. Patent No. 8,457,676 (“the ‘676 Patent,” HTC/ZTE Exhibit 1001) generally relates to the manner in which a mobile station in a wireless communication system reports its transmission power to a base station. The ‘676 Patent, in particular, is concerned with how often a mobile station transmits a “power headroom” report (also called a “power control headroom” report). Noting that it can be problematic when these reports are sent too frequently, the ‘676 Patent proposes the use of triggers to limit how often a mobile station transmits a report. The alleged novelty recited in claims 1 and 19-a triggering criterion that is met upon reaching a threshold of elapsed time since the previous report-however, was well known to persons of ordinary skill in the art before the earliest alleged priority date of the ‘676 Patent.

For example, U.S. Patent Pub. No. 2004/0223455 (HTC/ZTE Exhibit 1003, “Fong”) limits the transmission of power headroom reports by a mobile station through the use of a trigger that is met when a threshold amount of time has passed since the previous power headroom report. A standards-related document (HTC/ZTE Exhibit 1004, “Ericsson Contribution”) additionally teaches that the threshold amount of time between reports may be measured in transmission time intervals (TTIs).

Claims 3 and 21 of the '676 Patent depend from claims 1 and 19, respectively, and add a triggering criterion based on changes in path loss (*i.e.*, the degradation of the wireless signal between the mobile and base station). Controlling the frequency of power headroom reports based on changes in signal strength including path loss, however, was well-known before the '676 Patent, as disclosed in U.S. Patent No. 6,445,917 (HTC/ZTE Exhibit 1005, "Bark").

The evidence in this petition demonstrates that claims 1, 3, 19, and 21 of the '676 Patent are unpatentable under pre-AIA 35 U.S.C. § 103. Accordingly, HTC Corporation, HTC America, Inc., ZTE Corporation, and ZTE (USA), Inc. ("Petitioner") respectfully requests that claims 1, 3, 19, and 21 of the '676 Patent be held invalid and cancelled.

## **II. MANDATORY NOTICES**

### **A. Real Party-in-Interest**

The real parties-in-interest are HTC Corporation, HTC America, Inc., ZTE Corporation, and ZTE (USA), Inc.

### **B. Related Matters**

The '676 patent is the subject of the following patent infringement lawsuits brought by Patent Owner in the U.S. District Court for the Eastern District of Texas (Marshall Division): *Cellular Communications Equipment LLC v. AT&T Inc., et al.* Case No. 2:15-cv-00576; *Cellular Communications Equipment LLC v. Sprint Corp., et al.* Case No. 2:15-cv-00579; *Cellular Communications Equipment*

*LLC v. T-Mobile USA, Inc., et al.* Case No. 2:15-cv-00580; and *Cellular Communications Equipment LLC v. Verizon Comm. Inc., et al.* Case No. 2:15-cv-00581.

This petition presents the same prior art references, and the same grounds applying those references, in Apple Inc.’s petition upon which *inter partes* review was instituted in Case IPR2016-01493 (PTAB February 13, 2017). The ’676 patent is also involved in Case IPR2016-01501 (instituted) (PTAB February 13, 2017).

**C. Lead and Backup Counsel Under 37 C.F.R. § 42.8(b)(3)**

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