

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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HTC CORPORATION and HTC AMERICA, INC.,  
Petitioners,

v.

CELLULAR COMMUNICATIONS EQUIPMENT LLC,  
Patent Owner.

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Case IPR2016-01501  
Patent 8,457,676

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**PETITIONERS' REPLY TO PATENT OWNER'S RESPONSE**

Mail Stop Patent Board  
Patent Trial and Appeal Board  
P.O. Box 1450  
Alexandria, VA 22313-1450

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Under 37 C.F.R. § 42.23, Petitioners HTC Corporation and HTC America, Inc. ("Petitioner") Reply to Patent Owner Cellular Communications Equipment LLC's Response (Paper 11) ("Resp."). With this Reply and its Petition, Petitioner requests cancellation of claims 1, 19, and 33 of U.S. Patent No. 8,457,676.

## **I. Introduction**

Patent Owner's disputes with Petitioner's evidence and the Board's decision to institute (Paper 7) ("Dec.") are largely centered on three issues. First, Patent Owner contends that U.S. Pat. Pub. No. 2006/0140154 (Kwak) (Ex. 1005) is not "analogous" art, contrasting Kwak's third generation system with the '676 patent's purported fourth generation solution. But the patent is not limited to 4G systems and, to the contrary, expressly states its applicability to other systems like 3G.

Second, Patent Owner contends that Kwak does not disclose TPS periods that are "adjustable" via signaling, arguing that Kwak's reference to "notifying" a value via signaling means providing the value only once. But by contrasting a "fixed" value with a value that is "notified" to the user equipment (UE) via upper layer signaling, Kwak teaches that the value can be modified.

Finally, Patent Owner contends that Kwak does not disclose a threshold of k transmission time intervals (TTIs), arguing that Kwak's "time intervals" are not TTIs and that its TPS periods are not measured in TTIs. But Kwak expressly

teaches that its time intervals are TTIs, and one of ordinary skill in the art understand that Kwak's s TPS period are measured in those time intervals.

## II. Patent Owner fails to distinguish Kwak as not "analogous"

Patent Owner attempts to distinguish Kwak by characterizing the '676 patent as limited to 4G systems and contending that Kwak's 3G system cannot offer an "analogous" solution. Resp. at 14. Patent contends that Dr. Williams fails to account for these purported differences, rendering his opinions incomplete and unreliable. *Id.* at 14-15. Patent Owner is incorrect.

The '676 patent is not limited to 4G systems. The patent explains that, at the time, many features of 3G systems "have already been established, but many other features have yet to be perfected." Ex. 1001 ('676 patent) at 1:21-24. It explains that one example of a then-current 3G system was the Universal Mobile Telecommunications System (UMTS) and its Terrestrial Radio Access Network (UTRAN), which the patent describes and illustrates. *See id.* at 1:26-42 & Fig. 1. The patent also describes that Evolved UTRAN (E-UTRAN) is "meant to take 3G even farther into the future," and refers to it alternatively as Long Term Evolution (LTE) and 3.9G. *Id.* at 1:49-55, 4:28-29. But the purported invention is not limited to LTE/3.9G systems. Rather, the patent states that its principles are applicable to other "current" systems, like 3G:

Although the present invention is applicable in the context of the E-UTRAN (LTE or 3.9G), **its principles are not limited to such an**

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