

# EXHIBIT 15

*Inter Partes* Review No.: Unassigned

Petition For *Inter Partes* Review

U.S. Patent No. 8,385,966

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

KYOCERA COMMUNICATIONS, INC.

Petitioner

v.

CELLULAR COMMUNICATIONS EQUIPMENT LLC

Patent Owner

Patent No. 8,385,966

Issue Date: February 26, 2013

Title: METHOD, APPARATUS AND COMPUTER PROGRAM FOR POWER  
CONTROL RELATED TO RANDOM ACCESS PROCEDURES

---

*Inter Partes* Review No. Unassigned

---

**PETITION FOR *INTER PARTES* REVIEW  
UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.100 *ET. SEQ.***

*Inter Partes* Review No.: Unassigned  
 Petition For *Inter Partes* Review  
 U.S. Patent No. 8,385,966

$$\begin{aligned} \text{PUSCH\_power} = & -\text{RX\_power} + \text{interference\_correctoin} + \\ & \text{offset\_power} + \text{added\_correction} + \text{power\_ramp\_up} + \\ & \text{PC\_correction} + \text{PUSCH\_RACH\_power\_offset}; \end{aligned}$$

This rewritten equation shows that the transmit power for Message 3 is based on  $f(0)$ , *i.e.*, the sum of the PC\_correction ( $\Delta P_{PC}$ ) and the power\_ramp\_up value ( $\Delta P_{\text{rampup}}$ ). (Ex. 1002, ¶¶[0069]-[0071]).

The power\_ramp\_up variable is used as part of the preamble power and the calculation of  $f(0)$ . This use of the power\_ramp\_up value is consistent with the ‘966 patent’s use of the terms. (Ex. 1002, ¶¶[0073]-[0076]). Specifically, Claim 5 does not initially appear to be consistent with Claim 1. Specifically, Claim 1 notes that the initial transmit power is based on the “preamble power” and  $f(0)$ . Claim 5 recites  $P_{\text{preamble}}$  but does not expressly recite  $f(0)$ . (Ex. 1002, ¶[0075]). As noted in the International Search Report of the corresponding PCT application, the equation in Claim 5 does not appear to be consistent with the wording of Claim 1. (*See*, Ex. 1013). In the PCT application, Claim 6 as originally filed is the same as Claim 5 in the ‘966 patent. (*See* Ex. 1014).

Claim 5 recites  $\Delta P_{PC\_Msg3}$ , which as explained below is equal to  $\Delta P_{PC}$  when calculating the power for Message 3. The formula in Claim 5, however, does not expressly recite  $\Delta P_{\text{rampup}}$ .  $f(0)$ , therefore, is not found in the equation as written in Claim 5. The missing  $\Delta P_{\text{rampup}}$ , however, can be found in Claim 5 as part of the

*Inter Partes* Review No.: Unassigned

Petition For *Inter Partes* Review

U.S. Patent No. 8,385,966

$P_{\text{preamble}}$  calculation. ('966 patent, 6:18-26; Ex. 1002, ¶¶[0075]-[0076]). Just as above, the equation in Claim 5 can be rewritten with the  $P_{\text{preamble}}$  variable expanded per Equation 3 from the '966 patent. When this is done, Claim 5 recites a formula for calculating a transmit power that depends on both  $P_{\text{preamble}}$  and  $f(0) = \Delta P_{\text{PC}} + \Delta P_{\text{rampup}}$ . (Ex. 1002, ¶¶[0074]-[0076]). Not allowing  $\Delta P_{\text{rampup}}$  to be considered part of the preamble transmit power and  $f(0)$  leads to Claims 5 and 14 that cannot be reconciled with Claims 1 and 11, respectively. (Ex. 1002, ¶[0076]).

Qualcomm, therefore, teaches calculating an initial transmit power that depends on the “second power control adjustment state  $f(0)$ .” (Ex. 1002, ¶¶[0073]-[0076]) Further, by calculating the sum of the PC\_correction and the power\_ramp\_up value as part of calculating the RACH power, Qualcomm teaches initializing  $f(0)$ . (Ex. 1002, ¶¶ [0069]-[0072]).

The '966 patent defines  $f(0)$  as both being calculated with  $\Delta P_{\text{PC}} + \Delta P_{\text{rampup}}$  and reflecting an “open loop power control error.” ('966 patent, Claim 1). Open loop power control error can be represented as  $\Delta P_{\text{PC}} = P_{0\_UE\_PUSCH} + f(0) - \Delta P_{\text{rampup}}$ . (Ex. 1002, ¶[0046] and ¶[0072]). This equation can be rewritten as  $f(0) = \Delta P_{\text{PC}} + \Delta P_{\text{rampup}} - P_{0\_UE\_PUSCH}$ . (Ex. 1002, ¶[0046]). Accordingly, the  $\Delta P_{\text{PC}}$  value that is part of  $f(0)$  reflects an “open loop power control error.” (Ex. 1002, ¶[0046] and ¶[0072]). Qualcomm's use of the PC\_correction value, therefore, also reflects an open loop power control error. (Ex. 1002, ¶¶[0071]-[0072]).