IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

TQ DELTA, LLC, Plaintiff, v. COMCAST CABLE COMMUNICATIONS LLC, Defendant.	C.A. No. 15-cv-611-RGA
TQ DELTA, LLC, Plaintiff, v. COXCOM LLC and COX COMMUNICATIONS INC., Defendants.	C.A. No. 15-cv-612-RGA
TQ DELTA, LLC, Plaintiff, v. DIRECTV, LLC, Defendant.	C.A. No. 15-cv-613-RGA
TQ DELTA, LLC, Plaintiff, v. DISH NETWORK CORPORATION, DISH NETWORK L.L.C., DISH DBS CORPORATION, ECHOSTAR CORPORATION, AND ECHOSTAR TECHNOLOGIES L.L.C., Defendants.	C.A. No. 15-cv-614-RGA

TQ DELTA, LLC, Plaintiff, v. TIME WARNER CABLE INC. and TIME WARNER CABLE ENTERPRISES LLC, Defendants.	C.A. No. 15-cv-615-RGA
TQ DELTA, LLC, Plaintiff, v. VERIZON SERVICES CORP., Defendant.	C.A. No. 15-cv-616-RGA

CLAIM CONSTRUCTION ORDER

The Court has determined that the terms below shall be given the following meaning for the claims of each identified patent:

U.S. Patent Nos. 8,718,158 and 9,014,243:

1. "**carrier signal**" and "**carrier**" – "signal that can be modulated to carry data"
2. "**determin[e/ing] a phase shift for the carrier signal**" – "comput[e/ing] an amount by which the phase of the carrier signal will be shifted"
3. "**phase scrambler**" – "component operable to adjust the phases of the carrier signals, by pseudo-randomly varying amounts"
4. "**scrambling the phase characteristics of the carrier signals**" – "adjusting the phase characteristics of the carrier signals by pseudo-randomly varying amounts"

5. "**transceiver**" – "communications device capable of transmitting and receiving data wherein the transmitter portion and receiver portion share at least some common circuitry"
6. "**multicarrier**" – "having multiple carrier signals that are combined to produce a transmission signal"
7. "**bit scrambler**" – "component that pseudo-randomly changes the value of a bit"

U.S. Patent Nos. 8,611,404 and 9,094,268:

8. "**transceiver**" – "communications device capable of transmitting and receiving data wherein the transmitter portion and receiver portion share at least some common circuitry"
9. "**multicarrier**" – "having multiple carrier signals that are combined to produce a transmission signal"
10. "**low power mode**" – "state of operation in which power is consumed, but the amount of power consumed is less than when operating in a state with full data transmission capabilities"
11. "**stor[e/ing], in [a/the] low power mode, at least one parameter**" – "maintain[ing] in memory, while in low power mode, at least one parameter"
12. "**wherein the at least one parameter comprises at least one of a fine gain parameter and a bit allocation parameter**" – "wherein the at least one parameter includes a fine gain parameter and/or a bit allocation parameter"
13. "**fine gain parameter**" – "parameter used to determine power level on a per subcarrier basis"

14. "**bit allocation parameter**" – "parameter used to determine a number of bits to be carried by a subcarrier on a per subcarrier basis"
15. "**synchronization frame**" – "frame that indicates a superframe boundary"
16. "**synchronization signal**" – ""signal used to establish or maintain a timing relationship between transceivers"
17. "**apparatus comprising a transceiver operable to**" – "plain meaning with 'transceiver' as previously construed"
18. "**data**" – "content"

U.S. Patent Nos. 7,835,430 and 8,238,412:

1. "**transceiver**" – "communications device capable of transmitting and receiving data wherein the transmitter portion and receiver portion share at least some common circuitry"
2. "**multicarrier**" – "having multiple carrier signals that are combined to produce a transmission signal"
3. "**[transmitting/receiving] test information over a communication channel**" – "plain meaning"
4. "**test information**" – "information relating to a characteristic of a communication channel or the communications equipment operating on that channel"
5. "**array representing frequency domain received idle channel noise information**" – "ordered set of values representative of noise in the frequency domain that was received by a transceiver on respective subchannels in the absence of a transmission signal"
6. "**array representing power level per subchannel information**" – "ordered set of values representative of power levels of respective subchannels"

7. "**Reverb signal**" – "signal generated by modulating carriers in a multi carrier system with a known pseudo-random sequence to generate a wideband modulated signal"

IT IS SO ORDERED this 6 day of December, 2016.

The Honorable Richard G. Andrews