

Filed on behalf of TQ Delta LLC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC., DISH NETWORK, LLC,
COMCAST CABLE COMMUNICATIONS, LLC,
COX COMMUNICATIONS, INC.,
TIME WARNER CABLE ENTERPRISES LLC,
VERIZON SERVICES CORP., and ARRIS GROUP, INC.,
Petitioner,

v.

TQ DELTA, LLC,
Patent Owner.

Case IPR2016-01006¹
Patent No. 7,835,430 B2

**PATENT OWNER'S OBJECTIONS TO PETITIONERS'
DEMONSTRATIVES**

¹ DISH Network, L.L.C., who filed a Petition in IPR2017-00251, and Comcast Cable Communications, L.L.C., Cox Communications, Inc., Time Warner Cable Enterprises L.L.C., Verizon Services Corp., and ARRIS Group, Inc., who filed a Petition in IPR2017-00420, have been joined in this proceeding.

Patent Owner TQ Delta, LLC (“Patent Owner”) submits the below objections to Petitioners’ demonstrative exhibits. A copy of the objected-to portions of the demonstratives is attached hereto as Exhibit A.

- **Slide 5** – The statement “PO Expert, Dr. Short” is a mischaracterization of the record, or at the very least misleading, because Dr. Short is not Patent Owner’s expert in any of IPR2016-01006, -1007, -1008, or -1009 which are the subject of this hearing; he is an expert in an unrelated proceeding and his cited hearsay testimony is a subject of Patent Owner’s Motion to Exclude.

- **Slide 12** – The statement in the heading that “Patent Owner’s expert admits that ‘power spectral density’ represents ‘power level’” is not supported by the quoted testimony (i.e., Dr. Chrissan’s testimony that “if you integrated the power spectral density” then “you would have a measure of power”), because Dr. Chrissan was not specifically asked, nor did he answer, that power spectral density “represents” power level.

- **Slide 41** – The statement highlighted by Petitioners that “Another motivation provided in the Petition—also ignored by TQ Delta—was to ‘make Milbrandt’s system compliant with the ANSI T1.413 standard’” misrepresents the record, because Patent Owner did not ignore that alleged motivation, addressing it at pages 6 and 30-31 of its Preliminary Response and pages 20-21 of its Response.

- **Slide 5** – Patent Owner maintains its objection to the improper new Reply argument and evidence cited in this slide (the entirety of the slide), which was identified in Patent Owner's Listing of Improper Reply / New Argument and Evidence (Paper 21).

- **Slide 21** – Patent Owner maintains its objection to the improper new Reply argument and evidence cited in this slide (new expert testimony that “an array of SNR margin test parameters would in fact represent SNR per subchannel”), which was identified in Patent Owner's Listing of Improper Reply / New Argument and Evidence (Paper 21).

- **Slide 33** - Patent Owner maintains its objection to the improper new Reply argument and evidence cited in this slide (the entire slide regarding Milbrandt's alleged inability to “allow for readily assessing system interactions” by distinguishing different noise sources) which was identified in Patent Owner's Listing of Improper Reply / New Argument and Evidence (Paper 21).

- **Slide 38** - Patent Owner maintains its objection to the improper new Reply argument and evidence cited in this slide (new expert testimony that “[a] POSITA would have understood that the aggregate includes individual values for each of sub-carriers” and a new figure from new Exhibit 1009), which were identified in Patent Owner's Listing of Improper Reply / New Argument and

Patent Owner's Objections to Petitioners' Demonstratives

IPR2016-01006

Patent No. 7,835,430

Evidence (Paper 21).

- **Slide 42** - Patent Owner maintains its objection to the improper new Reply argument and evidence cited in this slide (new expert testimony that “a POSITA would have measured the PSD based on Reverb to understand the changes over the frequency spectrum (i.e., per subchannel)”, and a new figure from new Exhibit 1009), which was identified in Patent Owner’s Listing of Improper Reply / New Argument and Evidence (Paper 21).

Dated: August 1, 2017

/Peter J. McAndrews/

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CERTIFICATE OF SERVICE

I hereby certify, pursuant to 37 C.F.R. Section 42.6, that a complete copy of the attached **PATENT OWNER'S OBJECTIONS TO PETITIONERS' DEMONSTRATIVES** is being served via electronic mail on August 1, 2017 to the following:

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