

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 IPR2016-01020¹
Patent 9,014,243

**PETITIONER'S ITEMIZED LISTING
PURSUANT TO PAPER 21**

¹ DISH Network, LLC, who filed a Petition in IPR2017-00254, and Comcast Cable Communications, LLC, Cox Communications, Inc., Time Warner Cable Enterprises LLC, Verizon Services Corp., and ARRIS Group, Inc., who filed a Petition in IPR2017-00418, have been joined in this proceeding.

Pursuant to the Board's Order, Paper 21, Petitioner respectfully submits this itemized listing identifying specific portions in Patent Owner's Response ("PO Resp.," Paper 12), as the material that triggered or caused the Petitioner to include in its Reply each item listed by Patent Owner in Paper 22:

- 1) PO Resp., p. 2, *ll.* 8-17; p. 43, *ll.* 3-7 & 21-23; p. 47, *ll.* 7-11; p. 50, *ll.* 7-14; p. 51, *ll.* 1-6.
- 2) PO Resp., p. 2, *ll.* 15-17; p. 7, *l.* 4 - p. 8, *l.* 7; p. 9, *ll.* 2-7; p. 10, *ll.* 4-15; p. 45, *ll.* 1-10; p. 49, *ll.* 12-16.
- 3) PO Resp., p. 27, *l.* 1 - p. 29, *l.* 1; p. 47, *ll.* 7-18; p. 48, *ll.* 14-18.
- 4) PO Resp., p. 43, *ll.* 3-7 & 21-23; p. 45, *ll.* 14-19; p. 51, *ll.* 3-6 & 8-11; p. 58, *l.* 12 - p. 59, *l.* 3.
- 5) PO Resp. p. 2, *ll.* 8-12; p. 43, *ll.* 3-7 & 21-23; p. 45, *l.* 4-19; p. 47, *ll.* 1-2.
- 6) PO Resp., p. 55, *l.* 11 - p. 57, *l.* 21.
- 7) PO Resp., p. 34, *ll.* 4-11; p. 44, *ll.* 1-9; p. 51, *ll.* 3-6; p. 58, *l.* 19 - p. 59, *l.* 3.
- 8) PO Resp., p. 32, *l.* 1 - p. 34, *l.* 11; p. 36, *l.* 9 - p. 37, *l.* 5; p. 44, *ll.* 1-7.
- 9) PO Resp., p. 19, *l.* 12 - p. 20, *l.* 1; p. 20, *ll.* 6-9; p. 27, *l.* 1 - p. 29, *l.* 4.
- 10) PO Resp., p. 23, *l.* 6 - p. 29, *l.* 4; p. 50, *ll.* 7-14.
- 11) PO Resp., p. 7, *l.* 4 - p. 8, *l.* 7; p. 10, *ll.* 4-15; p. 50, *l.* 7-14.
- 12) PO Resp., p. 19, *l.* 12 - p. 20, *l.* 1; p. 20, *ll.* 6-9; p. 27, *l.* 1 - p. 29, *l.* 4.
- 13) PO Resp., p. 2, *ll.* 8-12; p. 23, *l.* 6 - p. 29, *l.* 4; p. 47, *ll.* 7-11; p. 50, *ll.* 9-14.

- 14) PO Resp., p. 2, *ll.* 8-14; p. 23, *l.* 6 - p. 29, *l.* 4; p. 47, *ll.* 7-11; p. 50, *ll.* 9-14.
- 15) PO Resp., p. 2, *ll.* 8-14; p. 23, *l.* 6 - p. 29, *l.* 4; p. 47, *ll.* 7-11; p. 50, *ll.* 9-14.
- 16) PO Resp., p. 55, *l.* 11 - p. 57, *l.* 21.
- 17) PO Resp., p. 17, *l.* 4 - p. 18, *l.* 23; p. 34, *ll.* 4-11; p.44, *ll.* 1-7; p. 51, *ll.* 3-6;
p. 58, *l.* 12 - p. 59, *l.* 3.
- 18) PO Resp., p. 23, *l.* 6 - p. 29, *l.* 4; p. 50, *ll.* 7-14.
- 19) Ex. 1027, p. 81, *l.* 18 - p. 90, *l.* 5.
- 20) PO Resp., p. 34, *ll.* 4-11; p. 43, *ll.* 3-7; p. 45, *ll.* 14-19; p. 49, *ll.* 5-16.
- 21) PO Resp., p. 28, *ll.* 13-19; p. 34, *ll.* 4-11; p. 45, *ll.* 14-19; p. 49, *ll.* 5-16.
- 22) PO Resp., p.7, *ll.* 8-9; p. 10, *ll.* 4-15; p. 34, *ll.* 4-11; p. 43, *ll.* 3-7; p. 45, *ll.*
14-19; p. 49, *ll.* 5-16.
- 23) PO Resp., p. 28, *ll.* 13-19; p. 34, *ll.* 4-11; p. 43, *ll.* 3-7.; p. 45, *ll.* 14-19; p.
49, *ll.* 5-16; p. 55, *l.* 11 - p. 57, *l.* 21.
- 24) PO Resp., p.7, *ll.* 8-9; p. 10, *ll.* 4-15; p. 55, *l.* 11 - p. 57, *l.* 21.
- 25) PO Resp., p.7, *ll.* 8-9; p. 10, *ll.* 4-15; p. 23, *l.* 6 - p. 29, *l.* 4.
- 26) PO Resp., p. 23, *l.* 6 - p. 29, *l.* 4.
- 27) PO Resp., p. 23, *l.* 6 - p. 29, *l.* 4.
- 28) PO Resp., p. 23, *l.* 6 - p. 29, *l.* 4.
- 29) PO Resp., p. 7, *ll.* 8-9; p. 34, *ll.* 4-11; p. 47, *ll.* 7-18; p. 49, *ll.* 5-16;
Ex. 2013, p. 8, *ll.* 2-8; p. 11, *ll.* 10-15; p. 15, *ll.* 16-22; p. 18, *ll.* 3-18.

Respectfully submitted,

July 3, 2017

/David L. McCombs/
David L. McCombs
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CERTIFICATE OF SERVICE

The undersigned certifies, in accordance with 37 C.F.R. § 42.205, that service was made on the Patent Owner as detailed below.

Date of service July 3, 2017

Manner of service Email: pmcandrews@mcandrews-ip.com;
twimbiscus@mcandrews-ip.com; smcbride@mcandrews-ip.com;
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[TQD- CISCO@mcandrews-ip.com](mailto:TQD-CISCO@mcandrews-ip.com)

Documents served Petitioner's Itemized Listing Pursuant to Paper 21

Persons served Peter J. McAndrews
Thomas J. Wimbiscus
Scott P. McBride
Christopher M. Scharff
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