

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**TQ DELTA, LLC,**  
*Appellant*

v.

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

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2018-1719, 2018-1930

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Appeals from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in Nos. IPR2016-  
01006, IPR2017-00251, IPR2017-00420, IPR2016-01008,  
IPR2017-00253, IPR2017-00419.

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**TQ DELTA, LLC,**  
*Appellant*

v.

**CISCO SYSTEMS, INC., ARRIS GROUP, INC.,**  
*Appellees*

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2018-1929

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Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2016-01007, IPR2017-00422.

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**TQ DELTA, LLC,**  
*Appellant*

v.

**CISCO SYSTEMS, INC.,**  
*Appellee*

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2018-1931

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Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2016-01009.

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**JUDGMENT**

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CHRISTOPHER M. SCHARFF, McAndrews, Held & Malloy, Ltd., Chicago, IL, argued for appellant. Also represented by PETER J. MCANDREWS.

THEODORE M. FOSTER, Haynes & Boone, LLP, Dallas, TX, argued for all appellees. Appellee Cisco Systems, Inc. also represented by DAVID L. MCCOMBS, DEBRA JANECE MCCOMAS.

HEIDI LYN KEEFE, Cooley LLP, Palo Alto, CA, for appellee DISH Network LLC. Also represented by JENNIFER VOLK, Reston, VA.

JOHN MATTHEW BAIRD, Duane Morris LLP, Washington, DC, for appellees Comcast Cable Communications, LLC, Cox Communications, Inc., Time Warner Cable Enterprises LLC, Verizon Services Corp., ARRIS Group, Inc. Also represented by CHRISTOPHER JOSEPH TYSON.

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THIS CAUSE having been heard and considered, it is

ORDERED and ADJUDGED:

PER CURIAM (PROST, *Chief Judge*, NEWMAN and MOORE, *Circuit Judges*).

**AFFIRMED. See Fed. Cir. R. 36.**

ENTERED BY ORDER OF THE COURT

May 9, 2019  
Date

/s/ Peter R. Marksteiner  
Peter R. Marksteiner  
Clerk of Court