

I, EDWARD CHIN, declare as follows:

1. I have personal knowledge or have acquired knowledge of the matters set forth herein, and if I am called to testify, I could testify competently thereto.

2. I am an attorney and Of Counsel at the Davis Firm P.C.

3. I represent TQ Delta, LLC (“TQ Delta”) in the following district court litigation in which TQ Delta’s patents are asserted: *TQ Delta, LLC v. CommScope Holding Company, Inc., CommScope Inc., ARRIS International Limited, ARRIS Global Ltd., ARRIS US Holdings Inc., ARRIS Solutions, Inc., ARRIS Technology, Inc., and ARRIS Enterprises, LLC*, Case No. 2:21-cv-00310-JRG (E.D. Tex.) (the “CommScope Litigation”). I also represent TQ Delta in the following district court litigation that has been consolidated with the CommScope Litigation: *TQ Delta, LLC v. Nokia Corp., Nokia Solutions and Networks Oy, and Nokia of America Corp.*, Case No. 2:21-cv-309-JRG (E.D. Tex.) (the “Nokia Litigation”). The CommScope Litigation and the Nokia Litigation will collectively be referred to as the “Texas Litigation.”

4. I was asked to provide a summary of the investment and efforts that have been made to date in the Texas Litigation.

5. On August 13, 2021, TQ Delta filed a complaint for patent infringement against CommScope Holding Company, Inc., CommScope Inc., ARRIS International Limited, ARRIS Global Ltd., ARRIS US Holdings Inc., ARRIS

Solutions, Inc., ARRIS Technology, Inc., and ARRIS Enterprises, LLC (collectively, “CommScope”). *See* Exhibit 1023. The Complaint in the CommScope Litigation asserted infringement of thirteen TQ Delta patents.

6. On August 13, 2021, TQ Delta filed a complaint for patent infringement against Nokia Corp., Nokia Solutions and Networks Oy, and Nokia of America Corp. (collectively, “Nokia”). *See* Exhibit 1022. The Complaint in the Nokia Litigation asserted infringement of nineteen TQ Delta patents. Of those nineteen patents, ten were also asserted in the CommScope Litigation.

7. On September 24, 2021, TQ Delta voluntarily dismissed its claims against ARRIS International Limited and ARRIS Global Ltd. in the CommScope Litigation without prejudice.

8. On October 22, 2021, CommScope filed an Answer to TQ Delta’s complaint in the CommScope Litigation in which CommScope asserted, among other things, affirmative defenses and counterclaims of invalidity with respect to TQ Delta’s asserted patents, including the 882 and 048 Patents.

9. On October 22, 2021, Nokia filed a motion to dismiss TQ Delta’s complaint in the Nokia Litigation with respect to certain expired patents that were asserted in the complaint.

10. On October 22, 2021, the District Court consolidated the Nokia Litigation with the CommScope Litigation.

11. On November 4, 2021, TQ Delta served its Preliminary Infringement Contentions on CommScope and Nokia. The infringement contentions included a cover pleading and over 40 claim chart exhibits, totaling hundreds of pages.

12. On November 11, 2021, the CommScope Defendants filed a motion to transfer the CommScope Litigation to the District of Delaware.

13. On November 12, 2021, TQ Delta filed its response in opposition to Nokia's Motion to Dismiss and filed its Reply to CommScope's counterclaims.

14. On November 19, 2021, Nokia filed its reply in support of its motion to dismiss.

15. On November 26, 2021, TQ Delta filed its sur-reply in opposition to Nokia's motion to dismiss.

16. On November 29, 2021, TQ Delta filed an unopposed motion for leave to propound expedited venue discovery that TQ Delta could use in its response to CommScope's motion to transfer.

17. On December 9, 2021, the parties filed the following in the Texas Litigation:

- a joint motion for entry of an agreed docket control order, which included a proposed case schedule, including a proposed date of January 2, 2023, for jury selection;
- a joint motion for entry of an agreed discovery order; and

- a joint motion for entry of an agreed protective order.

The parties also served initial disclosures on each other on December 9, 2021. TQ Delta served its first amended initial disclosures on Defendants on February 7, 2022, and its second amended initial disclosures on February 22, 2022. Nokia served its first amended initial disclosures on TQ Delta on January 19, 2022, and its second amended initial disclosures on March 17, 2022.

18. On December 17, 2021, the Court entered the agreed docket control order, discovery order, and protective order. *See* Exhibit 1028. The docket control order set the following deadlines (among others): fact discovery completed by August 15, 2022, dispositive motions filed by September 26, 2022, motions *in limine* filed by November 7, 2022, pretrial conference set for November 28, 2022, and jury selection set for January 2, 2023.

19. On December 20, 2021, the Court scheduled a *Markman* Hearing for June 3, 2022. That date was subsequently re-set to June 1, 2022.

20. On December 22, 2021, the Court granted TQ Delta and CommScope forty-five days to take venue discovery and required that TQ Delta file its response to CommScope's motion to transfer within fifteen days of completion of venue discovery and that CommScope file its reply with seven days of TQ Delta's Response.

21. On January 13, 2022, CommScope and Nokia served their invalidity contentions on TQ Delta. CommScope's invalidity contentions included a 105-page cover document and over 130 claim chart exhibits, and Nokia's invalidity contentions included a 581-page cover document and over 140 claim chart exhibits.

22. On January 28, 2022, Nokia filed its Answer and Counterclaims in response to TQ Delta's Complaint in which Nokia asserted, among other things, affirmative defenses and counterclaims of invalidity with respect to TQ Delta's asserted patents.

23. On February 4, 2022, CommScope and Nokia filed a motion for entry of an order focusing the number of patent claims and prior art references in the Texas Litigation.

24. On February 10, 2022, the parties exchanged proposed claim terms for construction.

25. On February 18, 2022, TQ Delta filed a response in opposition to CommScope's and Nokia's motion for entry of an order focusing the number of patent claims and prior art references.

26. On February 21, 2022, TQ Delta filed a motion for leave to amend its infringement contentions against Nokia.

27. On February 22, 2022, TQ Delta filed its response in opposition to CommScope's motion to transfer venue to the District of Delaware. The response

included a seventeen-page brief and eighteen exhibits. The response was filed after the parties had taken discovery on the issue of venue, which included both parties serving and responding to requests for production, interrogatories, and Rule 30(b)(6) deposition notices and TQ Delta taking the deposition of CommScope's designated witness, Jim Shead.

28. On February 25, 2022, CommScope filed its reply in support of its motion to transfer.

29. On February 28, 2022, CommScope and Nokia filed their reply in support of their motion for entry of an order focusing the patent claims and prior art in the Texas Litigation.

30. On March 3, 2022, the parties exchanged their preliminary claim constructions.

31. On March 4, 2022, TQ Delta filed a sur-reply in opposition to CommScope's motion to transfer.

32. On March 7, 2022, Nokia filed a response in opposition to TQ Delta's motion for leave to amend its infringement contentions against Nokia.

33. On March 7, 2022, TQ Delta filed its sur-reply in opposition to CommScope's and Nokia's motion for entry of an order focusing the patent claims and prior art in the Texas Litigation.

34. On March 14, 2022, TQ Delta filed its reply in support of its motion for leave to amend its infringement contentions against Nokia.

35. On March 14, 2022, the parties filed their joint claim construction and prehearing statement. That document was 138 pages long, including two claim chart exhibits that included each side's proposed constructions for disputed claim terms and evidence relied on for the constructions.

36. On March 21, 2022, Nokia filed its sur-reply in opposition to TQ Delta's motion for leave to amend its infringement contentions.

37. On March 28, 2022, the court issued an order denying CommScope's motion to transfer the case to the District of Delaware.

38. On April 1, 2022, Nokia filed a motion for leave to amend its invalidity contentions.

39. On April 20, 2022, TQ Delta filed its response in opposition to Nokia's motion for leave to amend its invalidity contentions.

40. On April 25, 2022, Nokia filed its reply in support of its motion for leave to amend its invalidity contentions.

41. On April 26, 2022, TQ Delta filed its opening claim construction brief with the Court. The brief was 30 pages long and included 25 exhibits comprising hundreds of pages and five expert declarations. Both TQ Delta and Defendants also

submitted technology tutorials to the Court in support of their claim construction positions.

42. On May 2, 2022, the Court issued an order on CommScope's and Nokia's motion for entry of an order focusing the patent claims and prior art in the Texas Litigation. The Court required that TQ Delta serve, by May 9, 2022, a Preliminary Election of Asserted Claims, which shall assert no more than ten claims from each patent and not more than a total of 32 claims and that, by May 18, 2022, the patent defendants shall serve a Preliminary Election of Asserted Prior Art, which shall assert no more than twelve prior art references against each patent and not more than a total of 40 references. The Court further required that (i) no later than 28 days before the service of expert reports by the party with the burden of proof on an issue, TQ Delta shall serve a Final Election of Asserted Claims, which shall identify no more than five asserted claims per patent from among the ten previously identified claims and no more than a total of 16 claims, and (ii) by the date set for the service of expert reports by the party with the burden of proof on an issue, the patent defendant serve a Final Election of Asserted Prior Art, which shall identify no more than six asserted prior art references per patent from among the twelve prior art references previously identified for that particular patent and no more than a total of 20 references.



43. On May 2, 2022, the Court also appointed a technical advisor to the case and ordered the parties to send courtesy copies of claim construction briefs, exhibits, and technology tutorials in PDF form to the technical advisor.

44. On May 2, 2022, TQ Delta filed a sur-reply in response to Nokia's motion for leave to amend its invalidity contentions.

45. On May 6, 2022, Defendants filed their responsive claim construction brief. The brief was 30 pages long and included 36 exhibits comprising hundreds of pages and three expert declarations.

46. On May 9, 2022, TQ Delta served its Preliminary Election of Asserted Claims on the Defendants.

47. On May 13, 2022, TQ Delta filed its reply claim construction brief, which was 12 pages long.

48. On May 29, 2022, Defendants served their Preliminary Election Of Prior Art on TQ Delta.

49. On May 20, 2022, the parties filed a joint claim construction chart with the Court.

50. On May 24, 2022, CommScope filed a motion to stay the Texas Litigation with respect to six patents (including the 882 and 048 Patents) that have been asserted by TQ Delta against 2Wire in the District of Delaware pending resolution of liability issues relating to those patents in the District of Delaware.

51. On May 27, 2022, Defendants filed a supplemental claim construction brief.

52. On June 1, 2022, the Court held a *Markman* hearing, and on June 8, 2022, the Court issued a 116-page claim construction order.

53. On June 7, 2022, TQ Delta filed its response in opposition to CommScope's motion for a partial stay.

54. On June 14, 2022, CommScope filed its reply in support of its motion for a partial stay.

55. On June 17, 2022, the Court set a hearing for June 29, 2022 on TQ Delta's Motion for Leave to Amend its Infringement Contentions and Nokia's Motion for Leave to Amend its Invalidity Contentions.

56. On June 21, 2022, TQ Delta filed its sur-reply in opposition to CommScope's motion for a partial stay.

57. On June 22, 2022, third-party defendants Avago Technologies International Sales Pte. Ltd., Broadcom Corporation, and Broadcom Incorporated (collectively, "Broadcom") filed a Motion to Enter Amended Docket Control Order and a Motion to Enter Amended Discovery Order.

58. On June 27, 2022, TQ Delta and Nokia filed a notice with the Court informing the Court that TQ Delta agrees to withdraw its opposition to Nokia's Motion for Leave to Amend its Invalidity Contentions and that Nokia agrees to

withdraw its opposition to TQ Delta's Motion for Leave to Amend its Infringement Contentions.

59. On June 28, 2022, the Court cancelled the June 29, 2022 hearing on TQ Delta's Motion for Leave to Amend its Infringement Contentions and Nokia's Motion for Leave to Amend its Invalidity Contentions as a result of each party's agreement to withdraw their opposition to the opposing party's Motion for Leave. The Court granted each Motion for Leave.

60. On June 28, 2022, the Court denied Nokia's motion to dismiss TQ Delta's complaint with respect to certain expired patents that were asserted in the complaint.

61. On June 28, 2022, the Court granted Broadcom's motion for leave to file a response to Nokia's sur-reply in opposition to Broadcom's motion to dismiss Nokia's third-party complaint.

62. On July 5, 2022, Nokia filed a reply to Broadcom's response to Nokia's sur-reply in opposition to Broadcom's motion to dismiss Nokia's third-party complaint.

63. On July 6, 2022, CommScope and Nokia filed responses to Broadcom's motions to enter an amended docket control order and to enter an amended discovery order, and TQ Delta filed a response to Broadcom's motion to enter an amended docket control order.

64. On July 6, 2022, Broadcom filed a motion to enter an amended protective order.

65. On July 7, 2022, CommScope filed a notice of stipulation regarding its invalidity contentions.

66. On July 8, 2022, TQ Delta filed a motion to compel discovery from Nokia.

67. On July 11, 2022, TQ Delta filed a motion to compel a deposition from Nokia, and Nokia filed a motion to compel discovery from TQ Delta.

68. On July 12, 2022, Nokia filed a motion to compel discovery from third-party defendant Broadcom.

69. On July 12, 2022, Broadcom filed a motion for leave to file a second response to Nokia's new arguments and evidence in support of Broadcom's motion to dismiss.

70. On July 13, 2022, Broadcom filed replies in support of its motions to enter an amended docket control order and to enter an amended discovery order.

71. On July 13, 2022, TQ Delta and Broadcom filed a joint motion to sever Nokia's third-party claim against Broadcom from the Texas Litigation.

72. On July 18, 2022, Nokia filed a response to Broadcom's further response in support of Broadcom's motion to dismiss Nokia's third-party complaint.

73. On July 18, 2022, Broadcom filed a motion for a protective order with respect to Nokia's Rule 30(b)(6) deposition notice to Broadcom.

74. On July 19, 2022, Broadcom filed a response in opposition to Nokia's motion to compel.

75. On July 20, 2022, Nokia and CommScope each filed a response in opposition to Broadcom's motion for an amended protective order.

76. On July 20, 2022, Nokia filed a sur-reply to Broadcom's reply in support of its motion to enter an amended docket control order.

77. On July 20, 2022, Nokia filed a sur-reply to Broadcom's reply in support of its motion to enter an amended discovery order.

78. On July 20, 2022, TQ Delta filed a response in opposition to Broadcom's motion to enter an amended protective order.

79. On July 21, 2022, the Court denied CommScope's motion for a partial stay.

80. On July 21, 2022, the Court denied third-party defendant Broadcom's motion to dismiss Nokia's claim but severed and stayed Nokia's claim pending an arbitrator's decision on whether the claim is arbitrable and, if so, until the completion of arbitration. In view of that decision, the Court denied as moot (i) Broadcom's motion to enter an amended docket control order, (ii) Broadcom's motion to enter an amended discovery order, (iii) Broadcom's motion to enter an amended protective

order, (iv) Broadcom's motion for leave to file a second response to Nokia's new arguments and evidence, (v) Nokia's motion to compel discovery from Broadcom, (vi) TQ Delta and Broadcom's joint motion to sever Nokia's claim against Broadcom, and (vii) Broadcom's motion for a protective order from Nokia's notice of Rule 30(b)(6) deposition.

81. On July 25, 2022, Nokia filed its responses in opposition to TQ Delta's motions to compel discovery and a deposition from Nokia, and TQ Delta filed its response in opposition to Nokia's motion to compel discovery from TQ Delta.

82. On July 26, 2022, TQ Delta filed a motion to compel discovery from CommScope.

83. On July 28, 2022, TQ Delta filed a second motion to compel discovery from CommScope.

84. On August 1, 2022, Nokia and CommScope filed a second motion for entry of an order focusing patent claims and a motion to expedite the briefing schedule for the second motion for entry of an order focusing patent claims.

85. On August 2, 2022, TQ Delta filed its response in opposition to Defendants' motion to expedite the briefing schedule for Defendants' second motion for entry of an order focusing patent claims.

86. On August 2, 2022, TQ Delta and the Defendants filed a Joint Motion to Amend Docket Control Order.

87. On August 3, 2022, the Court granted the parties' Joint Motion to Amend Docket Control Order and entered the First Amended Docket Control Order.

88. On August 4, 2022, the Court denied the Defendants' motion to expedite the briefing schedule for Defendants' second motion for entry of an order focusing patent claims.

89. The following discovery has taken place in the Texas Litigation in addition to the aforementioned discovery related to venue:

- TQ Delta has produced over 540,000 pages of documents to Nokia and CommScope.
- CommScope has produced over 44,000 pages of documents to TQ Delta, and CommScope's counsel (who is also counsel for 2Wire, Inc.) agreed that over 57,000 pages of documents that were produced by 2Wire, Inc. in the case of *TQ Delta, LLC v. 2Wire, Inc.*, Case 1:13-cv-01835-RGA (D. Del.) may be deemed as produced between TQ Delta and CommScope in the Texas Litigation.
- Nokia has produced over 802,000 pages of documents to TQ Delta.
- TQ Delta has served 30 interrogatories on CommScope and 28 interrogatories on Nokia. CommScope and Nokia have responded to those interrogatories.
- CommScope has served 35 interrogatories on TQ Delta, and TQ Delta has responded to those interrogatories.

- Nokia has served 29 interrogatories on TQ Delta, and TQ Delta has responded to Nokia's interrogatories Nos. 1-20.
- Nokia has served 56 requests for admission on TQ Delta, and TQ Delta has responded to requests for admission Nos. 1-12.
- CommScope and Nokia deposed TQ Delta's expert Dr. Todor Cooklev on April 8, 2022.
- On June 3, 2022, TQ Delta served Rule 30(b)(1) notices of deposition to Nokia witnesses Danny Van Bruyssel, Patrick Moris, Patrick Neiryneck, and Luc De Clerq.
- On June 6, 2022, TQ Delta served a Rule 30(b)(6) notice of deposition to Nokia on technical topics. Deposition testimony on certain topics from this notice has been taken through various witnesses and is expected to continue on future dates.
- On June 6, 2022, Nokia and CommScope served a Rule 30(b)(1) notice of deposition to Marcos Tzannes.
- On June 6, 2022, TQ Delta served a Rule 30(b)(6) notice of deposition to Nokia on damages-related topics. Deposition testimony on certain topics from this notice has been taken through various witnesses and is expected to continue on future dates.



- On June 15, 2022, Nokia served a Rule 30(b)(6) notice of deposition to TQ Delta. The requested date of the deposition is July 28, 2022.
- On June 15, 2022, CommScope served a Rule 30(b)(6) notice of deposition to TQ Delta. The requested date of the deposition is July 29, 2022.
- On June 15, 2022, TQ Delta deposed Nokia employee Danny Van Bruyssel as a Rule 30(b)(6) corporate representative for Nokia.
- On June 16, 2022, TQ Delta deposed Nokia employee Patrick Moris as a Rule 30(b)(6) corporate representative for Nokia and deposed Nokia employee Patrick Neirynck as a Rule 30(b)(6) corporate representative for Nokia and in his personal capacity.
- On June 16, 2022, TQ Delta produced 2,628 pages of Aware, Inc.'s documents to CommScope and Nokia with Aware's permission. I understand that the documents were originally produced by Aware in response to a subpoena for documents in TQ Delta's litigation in Delaware federal court.
- On June 17, 2022, TQ Delta deposed Nokia employee Luc De Clercq as a Rule 30(b)(6) corporate representative for Nokia and in his personal capacity.
- On June 27, 2022, TQ Delta served a Rule 30(b)(6) notice of deposition to CommScope on damages-related topics. The requested date of the deposition is July 11, 2022.

- On June 29, 2022, TQ Delta served Rule 30(b)(1) notices of deposition to the following CommScope witnesses: Benjamin Miller, Jaime Salazar, Paul Baker, Mark Smorenburg, James Shead, Dan Hagarty, Craig Herro, Dominique Lesaffre, Rajagopalan Ramanujam, Steve Cochran, Wilson Wang, Joe Chow, Courtney Rosenthal, Steve Wauters, and Bryce Garrett. The requested dates of the depositions are July 13 through July 25, 2022.
- On June 30, 2022, TQ Delta served Rule 30(b)(1) notices of deposition to the following Nokia witnesses: Brian Beatus, Jeff Carithers, Frank Devolder, Thomas Maclean, Denis Mestdagh, Albin Schaetzle, and Paul Spruyt.
- On July 6, 2022, Nokia served Rule 30(b)(1) notice of deposition to Bruce Bernstein. The deposition has not been scheduled.
- On July 6, 2022, TQ Delta produced 6,318 pages of Aware, Inc.'s documents to CommScope and Nokia with Aware's permission. I understand that the documents were originally produced by Aware in response to a subpoena for documents in TQ Delta's litigation in Delaware federal court.
- On July 11, 2022, Nokia and CommScope served Rule 30(b)(1) notices of deposition to TQ Delta witnesses Abha Divine and Mark Roche and the following third-parties: Marcos Tzannes, Michael Tzannes, Christopher Cahill, David Krinsky, Edmund Reiter, Kevin Russell, Michael Lund, and Robert Pizzano.

- On July 12, TQ Delta produced 1,608 pages of documents in the litigation.
- On July 13, 2022, CommScope and Nokia deposed the primary inventor of the TQ Delta patents, Marcos Tzannes.
- On July 17, 2022, TQ Delta served a Rule 30(b)(6) notice of deposition to Nokia on additional damages-related topics.
- On July 17, 2022, TQ Delta served a Rule 30(b)(6) notice of deposition to CommScope on additional damages-related topics.
- On July 20, 2022, Nokia served a Rule 30(b)(1) notice of deposition to Ryan Phillips.
- On July 22, 2022, Nokia and CommScope deposed third-party witness Christopher Cahill.
- On July 22, 2022, TQ Delta served a Rule 30(b)(1) notice of deposition to Nokia witness Byron Holtz.
- On July 26, 2022, CommScope and Nokia deposed third-party witness Michael Tzannes.
- On July 28, 2022, TQ Delta deposed CommScope witness Benjamin Miller as a Rule 30(b)(6) corporate representative for CommScope.
- On July 28, 2022, TQ Delta deposed Nokia employee Thomas MacLean as a Rule 30(b)(6) corporate representative for Nokia.

- On July 29, 2022, TQ Delta deposed Nokia employee Jeff Carithers as a Rule 30(b)(6) corporate representative for Nokia.
- On August 4, 2022, Nokia and CommScope deposed Abha Divine as a Rule 30(b)(6) witness for TQ Delta.
- On August 4, 2022, TQ Delta deposed Nokia employee Frank Devolder as a Rule 30(b)(6) corporate representative for Nokia.
- During the Texas Litigation, TQ Delta has served subpoenas for documents on five third parties, CommScope has served subpoenas for documents on four third parties, and Nokia has served subpoenas for documents and depositions on sixteen third parties.

90. The schedule for the rest of the case is as follows:

- August 19, 2022 –Deadline to Complete Fact Discovery and File Motions to Compel Discovery
- August 29, 2022 – Serve Disclosures for Expert Witnesses by the Party with the Burden of Proof
- September 20, 2022 – Serve Disclosures for Rebuttal Expert Witnesses
- September 23, 2022 – Deadline to Complete Expert Discovery
- September 30, 2022 – File Dispositive Motions and File Motions to Strike Expert Testimony
- October 14, 2022 – Response to Dispositive Motion

- October 17, 2022 – Serve Pretrial Disclosures
- October 31, 2022 – Serve Objections to Pretrial Disclosures and Serve Rebuttal Pretrial Disclosure
- November 7, 2022 – Serve Objections to Rebuttal Pretrial Disclosures and File Motions *in Limine*
- November 14, 2022 – File Notice of Request for Daily Transcript or Real Time Reporting
- November 21, 2022 – File Joint Pretrial Order, Joint Proposed Jury Instructions, Joint Proposed Verdict Form, Responses to Motions *in Limine*, Updated Exhibit Lists, Updated Witness Lists, and Updated Deposition Designations
- November 28, 2022 – Pretrial Conference
- December 5, 2022 – Joint submission of jury questionnaire to the Deputy Clerk
- January 2, 2023 – Jury Selection and Trial

I declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Date: August 5, 2022

A handwritten signature in black ink, appearing to read 'Ed Chin', written over a horizontal line.

Edward Chin