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**UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA**

ENTROPIC COMMUNICATIONS, LLC,

Plaintiff,

v.

COMCAST CORPORATION; COMCAST
CABLE COMMUNICATIONS, LLC;
AND COMCAST CABLE
COMMUNICATIONS MANAGEMENT,
LLC,

Defendants.

Case No.: 2:25-cv-7969

**ORIGINAL COMPLAINT FOR
PATENT INFRINGEMENT**

DEMAND FOR JURY TRIAL

Comcast, Ex. 1083
Comcast v. Entropic
IPR2025-00180

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

SAGEMCOM-1083
IPR2026-00263

1 Plaintiff, Entropic Communications, LLC (“Entropic”), files this complaint for
2 patent infringement against Comcast Corporation (“Comcast Corp.”); Comcast
3 Cable Communications, LLC (“Comcast Communications”); and Comcast Cable
4 Communications Management, LLC (“Comcast Management”) (collectively
5 “Comcast”) and in support thereof alleges as follows:

6 1. This is a civil action arising under the patent laws of the United States,
7 35 U.S.C. § 1 *et seq.*, including specifically 35 U.S.C. § 271, based on Comcast’s
8 infringement of U.S. Patent Nos. 8,223,775 (the “775 Patent”), 8,284,690 (the “690
9 Patent”), 8,792,008 (the “008 Patent”), 9,210,362 (the “362 Patent”), 9,825,826 (the
10 “826 Patent”), 10,135,682 (the “682 Patent”), 11,381,866 (the “866 Patent”),
11 11,399,206 (the “206 Patent”), 11,785,275 (the “275 Patent”), and 9,866,438 (the
12 “438 Patent”) (collectively, the “Patents-in-Suit”).¹

13 **THE PARTIES**

14 2. Entropic is a Delaware limited liability company with an office at 7150
15 Preston Road, Suite 300, Plano, Texas 75024.

16 3. Entropic is the owner by assignment to all right, title, and interest to the
17 Patents-in-Suit. Entropic is the successor-in-interest of the Patents-in-Suit.

18 4. Upon information and belief, Comcast Corp. is a corporation organized
19 and existing under the laws of Pennsylvania, with a principal place of business at
20 1701 JFK Boulevard, Philadelphia, Pennsylvania 19103.

21 5. Comcast Corp. has, as its registered agent in California, CT Corporation
22 System, 330 N. Brand Blvd., Suite 700, Glendale, California 91203.

23
24
25
26 ¹ There is a pending action between the same two parties in the Central District of California
27 concerning the same patent claims, Civil Action No. 23-cv-1050. It remains undecided in that
28 case whether the Court has subject matter jurisdiction over the original complaint in that case, and
Entropic therefore is filing this suit to preserve its rights, as all parties agree that the VSA has
now expired. Entropic does not intend to proceed with this case unless and until the Court’s
subject matter jurisdiction in the -1050 case is resolved.

1 6. Comcast Corp., along with the other defendants, develops, markets,
2 sells, offers for sale and/or provides “Comcast” and “Xfinity” branded cable
3 television services and equipment to customers.

4 7. Comcast Communications is a limited liability company organized and
5 existing under the laws of Delaware, with a principal place of business at 1701 JFK
6 Boulevard, Philadelphia, Pennsylvania 19103. Upon information and belief, Comcast
7 Communications is a subsidiary of Comcast Corp.

8 8. Comcast Communications has, as its registered agent in California, CT
9 Corporation System, 330 N. Brand Blvd., Suite 700, Glendale, California 91203.

10 9. Comcast Communications, along with the other defendants, develops,
11 markets, sells, offers for sale and/or provides “Comcast” and “Xfinity” branded cable
12 television services and equipment to customers.

13 10. Comcast Management is a limited liability company organized and
14 existing under the laws of Delaware, with a principal place of business at 1701 JFK
15 Boulevard, Philadelphia, Pennsylvania 19103. Upon information and belief, Comcast
16 Management is a subsidiary of Comcast Corp.

17 11. Comcast Management has, as its registered agent in California, CT
18 Corporation System, 330 N. Brand Blvd., Suite 700, Glendale, California 91203.

19 12. Comcast Management, along with the other defendants, develops,
20 markets, sells, offers for sale and/or provides “Comcast” and “Xfinity” branded cable
21 television services and equipment to customers.

22 13. Comcast Corp. and/or Comcast Communications owns or leases, and
23 maintains and operates, several stores in this district by and through subsidiary
24 limited liability companies that they own, manage, and control, including Comcast
25 of Santa Maria, LLC and Comcast of Lompoc LLC. Upon information and belief,
26 Comcast Corp. and/or Comcast Communications (and/or other personnel employed
27 by them) negotiates and signs agreements on behalf of each of these entities.
28

1 14. Upon information and belief, Comcast Corp. and/or Comcast
2 Communications are the corporate managers of their subsidiary LLCs that own or
3 lease property in this district, and that own, store, sell, demonstrate, and lease
4 equipment in this district. Comcast Corp. and/or Comcast Communications have the
5 right to exercise near total control of each entity's operations through its LLC
6 agreements with each entity.

7 15. In each of those stores, Comcast Corp. and/or Comcast Communications
8 owns and stores equipment such as cable modems and set top boxes ("STBs"),
9 including the Accused Cable Modem Products (defined below), Accused Set Top
10 Products (defined below), and demonstrates the Accused Services (defined below)
11 provided via those products to Comcast customers by and through subsidiary limited
12 liability companies that it manages and controls.

13 16. Upon information and belief, Comcast Corp. and/or Comcast
14 Communications employs personnel that install, service, repair and/or replace
15 equipment, as appropriate, in this district by and through subsidiary limited liability
16 companies that it manages and controls.

17 17. Upon information and belief, Comcast Corp. and/or Comcast
18 Communications have two wholly owned subsidiaries in this Judicial District of
19 Central California ("District") that serve as their agents.

20 18. Comcast of Santa Maria, LLC ("Comcast Santa Maria") is a limited
21 liability company organized and existing under the laws of Pennsylvania, with a
22 principal place of business at 1701 JFK Boulevard, Philadelphia, Pennsylvania
23 19103. Comcast Santa Maria is a subsidiary of Comcast Corp.

24 19. Comcast Santa Maria, along with the other defendants, markets, sells,
25 offers for sale and/or provides "Comcast" and "Xfinity" branded cable television
26 services and equipment to customers.

1 20. Comcast of Lompoc, LLC (“Comcast Lompoc”) is a limited liability
2 company organized and existing under the laws of Pennsylvania, with a principal
3 place of business at 1701 JFK Boulevard, Philadelphia, Pennsylvania 19103.
4 Comcast Lompoc is a subsidiary of Comcast Corp.

5 21. Comcast Lompoc, along with the other defendants, markets, sells, offers
6 for sale and/or provides “Comcast” and “Xfinity” branded cable television services
7 and equipment to customers.

8 22. Upon information and belief, Comcast Communications, Comcast,
9 Management, Comcast Santa Maria, and Comcast Lompoc are the agents of Comcast
10 Corp. Upon information and belief, Comcast Corp. has complete and total control
11 over its agents Comcast Communications, Comcast Management, Comcast Santa
12 Maria, and Comcast Lompoc. On information and belief, Comcast Corp. shares
13 management, common ownership, advertising platforms, facilities, distribution
14 chains and platforms, stores, and accused product lines and products involving
15 related technologies with its agents, including at least Comcast Communications,
16 Comcast Management, Comcast Santa Maria, and Comcast Lompoc.

17 23. For example, Comcast Corp., Comcast Communications, Comcast
18 Management, Comcast Santa Maria, and Comcast Lompoc all have the same
19 principal place of business at 1701 JFK Boulevard, Philadelphia, Pennsylvania
20 19103.

21 24. The Comcast “Xfinity Residential Services Agreement” purports to
22 bind Comcast’s customers, including those customers in this District, to an agreement
23 with Comcast Communications for, *inter alia*, the Accused Services that Comcast’s
24 customers receive through the infringing use of the Accused Cable Modem Products
25 and the Accused Set Top Products.² This agreement further provides that an entity
26 other than Comcast Communications provides the services. Upon information and
27

28 ² <https://www.xfinity.com/Corporate/Customers/Policies/SubscriberAgreement>.

1 belief, the entity that provides the services to Comcast's customers and subscribers
2 is Comcast Management.

3 25. Comcast Management further shares a leadership team with Comcast
4 Corp.³ For example, Brian Roberts is the Chairman and Chief Executive Officer of
5 both Comcast Management and Comcast Corp.; Daniel Murdock is Executive Vice
6 President and Chief Accounting Officer of both Comcast Corp. and Comcast
7 Management; Francis Buono is Executive Vice President of Legal Regulatory Affairs
8 and Senior Deputy General Counsel of both Comcast Corp. and Comcast
9 Management; and Karen Buchholz is Executive Vice President, Administration of
10 both Comcast Corp. and Comcast Management.

11 **PRE-SUIT DISCUSSIONS**

12 26. Prior to filing this Complaint, Entropic sent a communication by
13 physical means to Comcast on August 9, 2022, in an attempt to engage Comcast
14 and/or its agents in good faith licensing discussions regarding Entropic's patent
15 portfolio, including the Patents-in-Suit.⁴ Comcast replied to the communication on
16 October 10, 2022, asking for additional information. On December 23, 2022,
17 Entropic sent Comcast another communication regarding a separate license to
18 Entropic's patents for the field of the standardized networking technology commonly
19 called MoCA, and also seeking to discuss with Comcast a typical non-disclosure
20 agreement in order to share such information.

21 **ENTROPIC'S LEGACY AS A CABLE INNOVATOR**

22
23 ³ *Compare* names found in Exhibit A to the attached [https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/video-](https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/video-franchising-and-broadband-analysis/video-franchising-main/applications-received-by-the-puc/2022/20220926-comcast-48a/comcast-48a-application.pdf)
24 [franchising-and-broadband-analysis/video-franchising-main/applications-received--](https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/video-franchising-and-broadband-analysis/video-franchising-main/applications-received-by-the-puc/2022/20220926-comcast-48a/comcast-48a-application.pdf)
25 [by-the-puc/2022/20220926-comcast-48a/comcast-48a-application.pdf](https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/video-franchising-and-broadband-analysis/video-franchising-main/applications-received-by-the-puc/2022/20220926-comcast-48a/comcast-48a-application.pdf) *with* the bios
26 of the identified personnel at Comcast's corporate leadership website,
27 <https://corporate.comcast.com/company/leadership>.

28 ⁴ The '206 Patent was not included in the list of issued Entropic patents discussed in the communication sent on August 9, 2022.

1 27. Entropic Communications Inc. (“Entropic Inc.”), the predecessor-in-
2 interest to Plaintiff Entropic as to the Patents-in-Suit, was founded in San Diego,
3 California in 2001 by Dr. Anton Monk, Itzhak Gurantz, Ladd El Wardani and others.
4 Entropic Inc. was exclusively responsible for the development of the initial versions
5 of the Multimedia over Coax Alliance (“MoCA”) standards, including MoCA 1.0,
6 ratified in 2006 and MoCA 1.1, ratified in 2007, and was instrumental in the
7 development of MoCA 2.0, ratified in 2010. It also developed Direct Broadcast
8 Satellite (“DBS”) Outdoor Unit (“ODU”) single wire technology and System-on-
9 Chip (“SoC”) solutions STBs in the home television and home video markets.
10 Entropic was widely known in the cable industry for these innovations and its
11 foundational development of MoCA.

12 28. Under the technical guidance of Dr. Monk, Entropic Inc. grew to be
13 publicly listed on the NASDAQ in 2007. After the public listing, the company
14 acquired RF Magic, Inc. in 2007, a company specializing in DBS ODU technology
15 and related hardware.

16 29. Additional growth between 2007 and 2015 bolstered the technical
17 expertise of Entropic Inc. with respect to signal acquisition, stacking, filtering,
18 processing, and distribution for STBs and cable modems.

19 30. For years, Entropic Inc. pioneered innovative networking technologies,
20 as well as television and internet-related technologies. These technologies simplified
21 the installation required to support wideband reception of multiple channels for
22 demodulation, improved home internet performance, and enabled more efficient and
23 responsive troubleshooting and upstream signal management for cable providers.
24 These innovations represented significant advances in the field, simplified the
25 implementation of those advances, and reduced expenses for providers and customers
26 alike.

MAXLINEAR’S TRANSFER OF PATENTS TO ENTROPIC

31. In 2015, MaxLinear, Inc. and MaxLinear, LLC (collectively, “MaxLinear”)—leading providers of radio-frequency, analog, digital, and mixed-signal semiconductor solutions—acquired Entropic Inc., as well as the pioneering intellectual property developed by Dr. Monk and his team.

32. Plaintiff Entropic was established in 2021

33.

34.

35.

5

6

1 36. [REDACTED]
2 [REDACTED]
3 [REDACTED]

4 37. Entropic has the full right to pursue the patent infringement claims
5 asserted in this action against Comcast.

6 **A. The VSA Between Comcast Management and MaxLinear, Inc. Does**
7 **Not Prohibit Entropic's Action Against Comcast**

8 38. No provision exists, nor has any provision ever existed, that deprives
9 Entropic of the right to sue Comcast for the patent infringement claims asserted in
10 this action.

11 39. Comcast has previously argued⁷ that MaxLinear, Inc. and Comcast
12 Management entered into a Vendor Support Agreement ("VSA") with an effective
13 date of August 1, 2020, although it was apparently executed in [REDACTED]

14 40. Comcast has further argued that the VSA includes a covenant not to sue
15 and has incorrectly argued that Entropic is allegedly bound by such covenant. This
16 alleged covenant not to sue only applies during the term of the VSA (the period
17 between the August 1, 2020, effective date and the VSA termination date is
18 hereinafter referred to as the "Term").

19 41. Entropic is not a party to the VSA and did not sign it nor has Entropic
20 taken any action to ratify or participate in the VSA.

21 42. Entropic has not been assigned any portion of MaxLinear, Inc.'s
22 obligations under the VSA, nor has Entropic been assigned the VSA itself.
23
24

25 ⁷ Herein, Entropic references certain arguments advanced by Comcast in *Entropic*
26 *Commc'ns, LLC v. Comcast Corp., et al.*, Case No. 2:23-cv-01050 (C.D. Cal., filed
27 Feb. 10, 2023) (consol. *Entropic Commc'ns, LLC v. Cox Commc'ns, Inc., et al.*, Case
28 No. 2:23-cv-01049 (C.D. Cal., filed Feb. 10, 2023) (Lead Case)) (hereinafter, "Case
No. 01050").

1 43. Indeed, the VSA contains a [REDACTED] provision, and any
2 covenants under the VSA are personal to MaxLinear, Inc. and do not run with the
3 assignment of any of MaxLinear, Inc.'s patents.

4 44. The VSA is similarly not enforceable against MaxLinear, LLC, who was
5 not a party to the VSA and did not sign the VSA.

6 45. As the parent company of MaxLinear, LLC, MaxLinear, Inc. did not
7 have the right to enter into any agreements that would convey any interest in or in
8 any way encumber MaxLinear, LLC's patents absent an express ownership interest
9 in MaxLinear, LLC's patent. Upon information and belief, no such express
10 ownership interest existed. Thus, MaxLinear, Inc. did not have the right to enter into
11 any agreements that would convey any interest in or in any way encumber
12 MaxLinear, LLC's patents.

13 46. Upon information and belief, Comcast made no effort to determine
14 whether MaxLinear, Inc. had any authority to convey any rights to MaxLinear, LLC's
15 patents, nor did Comcast make any effort to determine whether MaxLinear, Inc. had
16 any authority to bind MaxLinear, LLC to any agreement not to sue Comcast.

17 47. Upon information and belief, Comcast made no effort to determine
18 whether MaxLinear, Inc. had any authority to convey any rights to MaxLinear, LLC's
19 patents, nor did Comcast make any effort to determine whether MaxLinear, Inc. had
20 any authority to bind MaxLinear, LLC to any agreement not to sue Comcast.

21 48. The terms of the VSA do not indicate that MaxLinear, LLC was
22 provided notice of the intent to encumber its patents.

23 49. Accordingly, the VSA does not apply to any of the MoCA Patents, nor
24 does it apply to the '775 Patent or the '690 Patent. These patents were owned by
25 MaxLinear, LLC at the time of execution of the VSA, and therefore could not have
26 been encumbered by that agreement, to which MaxLinear, LLC was not a party.
27
28

1 50. The VSA does not list any intellectual property by registration or
2 application number that is allegedly subject to any provision of the VSA, including
3 but not limited to the alleged covenant not to sue.

4 51. By its terms, the VSA is a development agreement that provided that
5 Comcast may request that MaxLinear, Inc. “provide certain services, which could
6 include deliverables and support.” *See* VSA, § 1.1.

7 52. The VSA does not convey any rights to Comcast to use or practice any
8 of the patents owned by MaxLinear, Inc. or MaxLinear, LLC, nor does the VSA grant
9 Comcast a license to any of the Patents-in-Suit. *See* VSA, § 7.1(d).

10 53. Indeed, the VSA expressly notes [REDACTED]
11 [REDACTED] Rather, the
12 agreement is a services contract that deals with MaxLinear, Inc.’s potential
13 performance of services for Comcast at some point in the future. Further, no
14 provision of the VSA authorizes Comcast to commit any act that would otherwise be
15 patent infringement.

16 54. The VSA also does not grant Comcast any “have made” rights. Section
17 7.3 of the VSA only references Comcast’s “purchase, use, or deployment” of
18 products, but not its right to have any products made by third parties.

19 55. The VSA expressly provides that Section 7 does not preclude
20 MaxLinear, Inc., or any other entity, from asserting infringement claims against
21 Comcast’s third-party vendors, including the manufacturers of Comcast’s products.

22 56. Thus, Entropic is not restricted, by the VSA or otherwise, from asserting
23 patent infringement claims against manufacturers of the Accused Products at any
24 time.

25 57. On information and belief, Section 7.3 was only intended to prevent
26 Comcast from suing MaxLinear for: (1) products made by MaxLinear; and (2)
27 services performed by MaxLinear pursuant a Statement of Work (“SOW”), as that
28

1 term is defined in the VSA.⁸ [REDACTED]

2 [REDACTED]
3 [REDACTED] Thus, Section 7.3 does not preclude MaxLinear, Inc., or
4 any other party, from suing Comcast for infringement based on any product or service
5 that was not created or performed pursuant to a SOW under the VSA.

6 58. On information and belief, Comcast has attempted to circumvent a
7 finding of infringement by having infringing products made by third parties, resting
8 on the erroneous proposition that Section 7.3 of the VSA provides for “have made”
9 rights.

10 59. [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]

16 60. The VSA does not preclude MaxLinear, Inc. from bringing suit for
17 patent infringement relating to infringing conduct that took place during the Term of
18 the VSA, following expiration or early termination of the VSA.

19 61. At most, the relevant provisions of the VSA act as a “Covenant to Sue
20 Later,” which does not travel with any patents or other intellectual property rights. In
21 other words, no provision of the VSA encumbered any patents with licenses or other
22 rights and therefore no provisions of the VSA are enforceable as to future owners of
23 the patents owned by MaxLinear, Inc., the party to the VSA.

24 62. The express terms of the Covenant to Sue Later permit MaxLinear, Inc.
25 to bring patent infringement claims against Comcast for patents owned by
26

27 ⁸ On information and belief, the failure to capitalize “Service” in this section was a
28 typographical error.

1 MaxLinear, Inc. where the infringement is willful infringement, even during the
2 Term of the VSA. Comcast also admits, under its interpretation, that Section 7 is
3 terminated and has no effect if Comcast willfully infringed a MaxLinear patent prior
4 to the execution of the VSA. Because, as addressed below, Comcast willfully
5 infringed MaxLinear patents prior to the execution of the VSA, Section 7 is
6 inoperative and void, and provides no rights, even under Comcast's own
7 interpretation of Section 7's language.

8 63. No covenant or other agreement under Section 7 of the VSA, including
9 the Covenant to Sue Later, prevents Entropic from bringing suit under any patent
10 [REDACTED] including but not limited to the Patents-in-Suit. *See*
11 VSA, § 7.

12 64. Nowhere in the VSA is there any identification of consideration owed
13 to or paid to MaxLinear, Inc., or any other party, in exchange for Comcast's purported
14 covenant not to sue.

15 65. Comcast has not, upon information and belief, ever provided any
16 consideration to MaxLinear, Inc. or MaxLinear, LLC in exchange for its alleged
17 covenant not to sue.

18 66. Finally, no provision of the VSA precludes MaxLinear, Inc. or any other
19 entity from, after the Term of the VSA expires or terminates, asserting patent
20 infringement claims against Comcast for infringing conduct that took place during
21 the Term.

22 **B. Comcast Has, and Continues, to Willfully and Intentionally Infringe**
23 **the Patents-in-Suit**

24 67. The Patents-in-Suit are the result of years of research and development
25 in satellite and cable technology. These innovations are utilized by Comcast to
26 provide enhanced and expanded services to customers, which in turn has increased
27 revenues for Comcast while at the same time reducing costs.
28

1 68. Comcast invested in Entropic Inc. once in 2003, and again in 2006.

2 69. Upon information and belief, Comcast substantively reviewed and
3 analyzed Entropic Inc.'s patents and patent applications related to the Patents-in-Suit
4 as part of its due diligence prior to investing in Entropic Inc.

5 70. In addition, Comcast has willfully infringed the Patents-in-Suit in at
6 least the following ways.

7 **1. The Charter Suits**

8 71. On information and belief, Comcast had knowledge of its infringement
9 of certain of the Patents-in-Suit based on its awareness of the patent infringement suit
10 filed by Entropic against Charter Communications, Inc. ("Charter") in the Eastern
11 District of Texas, Case No. 2:22-CV-00125-JRG, on April 27, 2022. This suit against
12 Charter asserted the '775 Patent, the '690 Patent, the '008 Patent, the '362 Patent, the
13 '826 Patent, and the '682 Patent against Charter's provision of cable television and
14 internet services, cable modem products and STBs.

15 72. On information and belief, Comcast had knowledge of its infringement
16 of certain of the Patents-in-Suit based on its awareness of the patent infringement suit
17 filed by Entropic against Charter in the Eastern District of Texas, Case No. 2:23-CV-
18 00052-JRG, on February 10, 2023. This second suit against Charter asserted the '866
19 Patent and the '206 Patent against Charter's provision of cable television and internet
20 services, cable modem products and STBs. The complaint was amended on October
21 31, 2023, to assert the '275 Patent and '438 Patent against Charter.

22 73. Both Charter and Comcast are part of the close-knit business community
23 that is the cable industry, which is led by key industry players. These key players
24 work collaboratively to develop new technology and programs to drive the industry
25 forward, including through organizations like MoCA and the Society of Cable
26 Telecommunications Engineers.

1 74. Comcast and Charter actively collaborate together, have monthly
2 meetings across various departments, and have even collaborated together on accused
3 technologies. Specifically, Comcast and Charter have collaborated together on
4 Profile Management Application (“PMA”) technology and the implementation of full
5 band capture.

6 75. Comcast’s PMA implementation infringes the ’682 Patent in
7 substantially the same manner as Charter’s PMA implementation. Given the amount
8 of collaboration that occurs between Charter and Comcast, Comcast was aware of
9 the accusations against Charter’s PMA implementation.

10 76. Comcast’s implementation of remote spectrum monitoring functionality
11 in its Proactive Network Maintenance (“PNM”) system infringes the ’008 and ’826
12 Patents in substantially the same manner as Charter’s implementation of remote
13 spectrum monitoring in its PNM system. Given the amount of collaboration that
14 occurs between Charter and Comcast, Comcast was aware of the accusations against
15 Charter’s implementation of remote spectrum monitoring in its PNM system.
16 Additionally, Comcast collects information regarding the upstream channels as part
17 of the operation of its network, in a similar manner as Charter. This collection of
18 information regarding the upstream channels as part of the operation of a cable
19 network infringes the ’690 Patent.

20 77. Comcast’s usage of full band capture-enabled cable modems and STBs
21 infringes the ’362, ’866, ’206 and ’275 Patents in substantially the same manner as
22 Charter’s usage of full band capture-enabled cable modems and STBs. Given the
23 amount of collaboration that occurs between Charter, Comcast and its common
24 supplier(s) of the cable modems, STBs and underlying full band capture system-on-
25 chips (or SoCs), Comcast was aware of the accusations against Charter’s usage of
26 full band capture-enabled cable modems and STBs.

1 78. Comcast uses cable modem termination system (“CMTS”) hardware
2 and software as part of its cable network.

3 79. Comcast and Charter also collaborate together at events for the Society
4 of Cable Telecommunications Engineers (“SCTE”), of which both Comcast and
5 Charter are members. Among other things, Comcast and Charter participate in panels
6 together, share data and achievements related to SCTE, and work on peer-reviewed
7 papers together.

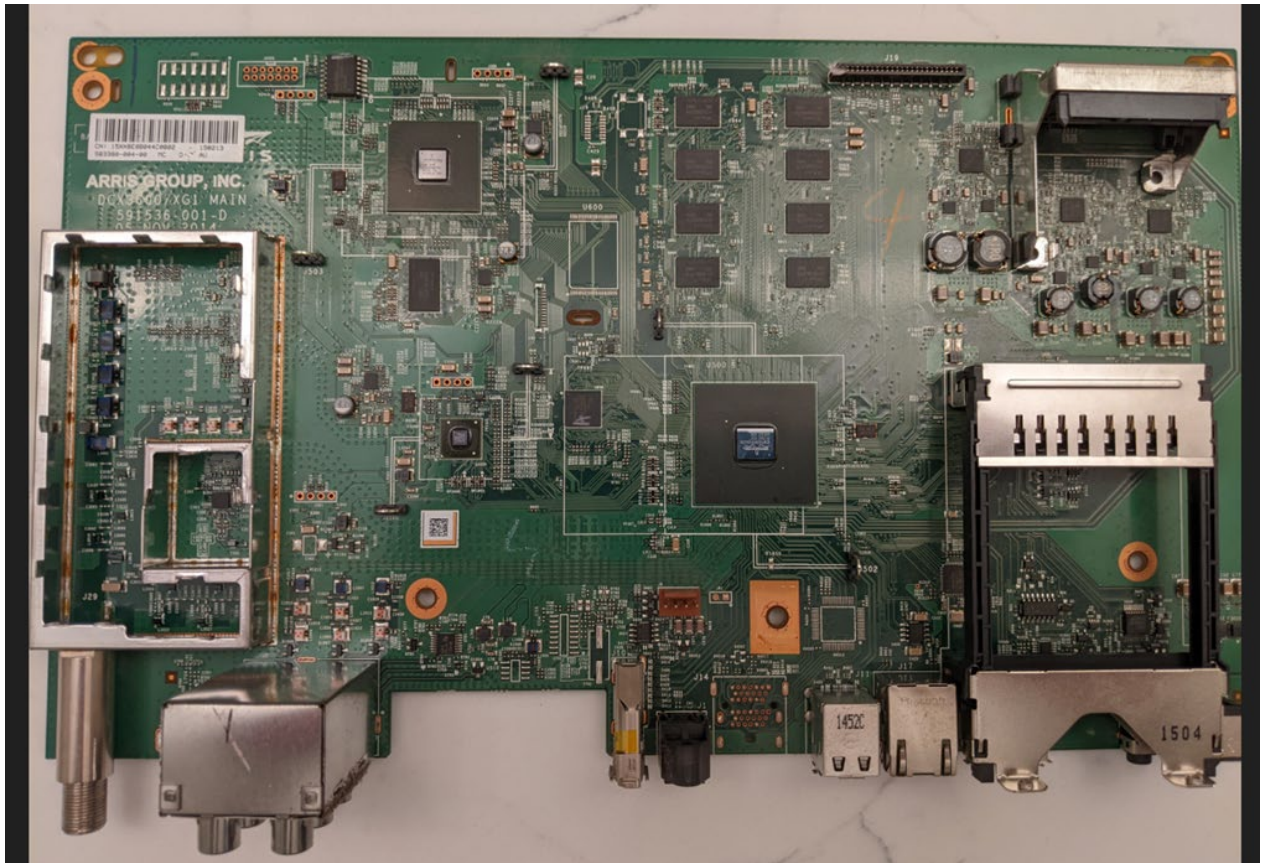
8 80. Charter and Comcast also “team up” to offer streaming devices and
9 other technology to customers. Indeed, The New York Times published an article
10 about such a joint venture between Comcast and Charter on April 27, 2022, the very
11 same day that the first suit against Charter was filed.

12 81. As evidenced by this article, Comcast knows that Charter utilizes
13 technology that functions almost identically to Comcast’s technology.

14 82. Among other things, Charter and Comcast utilize similar product
15 offerings that incorporate the same technologies. Charter and Comcast purchase their
16 products, including cable modems, STBs, and CMTS hardware and software, from
17 the same third parties. These products utilize the same or similar SoCs and other
18 processors and provide similar functionality. For example, both Charter and Comcast
19 provide whole-home DVR solutions utilizing MoCA to create an in-home network
20 over the on premises coaxial cabling. Similarly, both Charter and Comcast utilize
21 cable modems having Broadcom BCM3390 SoCs and STBs utilizing a combination
22 of Broadcom full-band capture SoCs to interface with the cable network and STB
23 SoCs to decode and display television content.

24 83. For example, one supplier of STBs, Arris, provides the DCX3600 to
25 both Comcast and Charter. Comcast refers to the Arris DCX3600 as the Arris
26 MX011ANM or XG1-A, and Charter refers to it simply as the Arris DCX3600. An
27
28

1 image of the circuit board included in the Arris DCX3600 is shown below, clearly
2 showing both the DCX3600 and XG1 branding:



17 84. The two Charter suits discussed herein asserted the same patents and
18 involved largely the same technology as is at issue in this action.

19 85. Given the close business relationship between Comcast and Charter, as
20 well as the joint ventures that Comcast was pursuing with Charter when these suits
21 were filed against Charter, Comcast was almost certainly aware of their filings.

22 86. Upon information and belief, and based on Comcast's awareness of the
23 substantial similarities between Comcast's and Charter's technology and products,
24 Comcast analyzed the claims asserted against Charter, the Patents-in-Suit, and the
25 Accused Products.

1 87. Upon information and belief, Comcast then analyzed its own products’
2 functionality in light of the patents asserted against Charter, and it confirmed that its
3 own products were functionally identical to the Charter products accused.

4 88. Upon information and belief, Comcast monitored the ongoing
5 prosecution of the ’362 Patent family, and therefore was aware of the U.S. Patent No.
6 11,381,866 (the “’866 Patent”) issued on July 5, 2022, and U.S. Patent No.
7 11,399,206 (the “’206 Patent”) issued on July 26, 2022.

8 89. Upon information and belief, Comcast analyzed its products’
9 functionality in light of the ’866 Patent.

10 90. Upon information and belief, Comcast analyzed its products’
11 functionality in light of the ’206 Patent.

12 91. Upon information and belief, Comcast thereafter determined that its
13 products infringe the Patents-in-Suit in substantially the same manner as Charter.

14 92. Nevertheless, Comcast continued to make, sell, or offer to sell the
15 infringing products.

16 93. Upon information and belief, Comcast requested indemnification from
17 Comcast’s suppliers for each of the patents asserted against Charter, including the
18 MoCA-related patents, prior to Entropic filing action against Comcast.

19 94. Comcast’s request for indemnification evidences its knowledge of the
20 risk that it infringed at least Entropic’s Non-SEP Patents, and that a suit similar to
21 the Charter Suit was likely to be initiated against Comcast.

22 **2. The DISH and DirecTV Suits**

23 95. Entropic filed a patent infringement suit against Dish Network
24 Corporation, DISH Network, LLC, and Dish Network Service, LLC (collectively,
25 “Dish”) in the Eastern District of Texas, Case No. 2:22-CV-00076, on March 9, 2022,
26 asserting infringement of three Entropic patents, including the ’008 Patent (the “Dish
27 Suit”).
28

1 96. Entropic filed a patent infringement suit against DirecTV, LLC, AT&T,
2 Inc., AT&T Services, Inc., and AT&T Communications, LLC in the Eastern District
3 of Texas, Case No. 2:22-CV-00075 on March 9, 2022, asserting infringement of three
4 Entropic patents, including the '008 Patent (the "DirecTV Suit").

5 97. Upon information and belief, Comcast contacted RPX Corporation
6 ("RPX") regarding the Charter Suit, Dish Suit, and DirecTV Suit after being served
7 with the complaint in the prior action between Entropic and Comcast, the 1050 Case.
8 Either before or shortly after its discussions with RPX, Comcast substantively
9 reviewed and analyzed the patents asserted in the Charter Suit, Dish Suit, and
10 DirecTV Suit.

11 **3. Comcast's Relationship with MaxLinear**

12 98. Comcast has willfully infringed the Patents-in-Suit based on knowledge
13 it gained from Patrick Tierney. Tierney, one of the named inventors of the '008 Patent
14 and '826 Patent, now works at Comcast. Accordingly, upon information and belief,
15 Comcast knew of the aforementioned Patents-in-Suit as early as the day Patrick
16 Tierney was hired. For example, upon information and belief, Comcast looked at
17 patents which named Patrick Tierney as an inventor as part of the process of
18 determining whether to offer him employment at Comcast.

19 99. Patrick Tierney and other MaxLinear employees frequently met with
20 Comcast and discussed the technologies of both MaxLinear and Entropic Inc. that
21 practiced the Patents-in-Suit. Thus, Patrick Tierney was well aware of the technology
22 and functionality of the Patents-in-Suit.

23 100. Indeed, before his employment at Comcast, Patrick Tierney often met
24 with Comcast personnel to discuss new technology for which MaxLinear and
25 Entropic Inc. had recently applied for or received patent protection.
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1 101. For example, Patrick Tierney met with Sam Chernak of Comcast on
2 December 20, 2012, less than a month after the '566 Patent issued. Upon information
3 and belief, Mr. Tierney told Mr. Chernak about the '566 Patent.

4 102. As another example, Comcast met with MaxLinear to ask MaxLinear to
5 support a low cost D3 modem on January 20, 2013, less than a month after the '681
6 Patent issued.

7 103. In his role at Comcast, on information and belief, Patrick Tierney shared
8 what he knew about the functionality and operation of the Patents-in-Suit with other
9 Comcast personnel, so that Comcast could continue to create products that infringe
10 upon the Patents-in-Suit.

11 104. Comcast also learned about the functionality of the Patents-in-Suit
12 through other events it attended, including the 2015 International Broadcasting
13 Convention, where MaxLinear presented information about new products and
14 technology that implemented the Patents-in-Suit.

15 105. MaxLinear also held several business discussions with Comcast in
16 2015, wherein MaxLinear discussed its products and technology that implemented
17 the Patents-in-Suit and explained how that technology could benefit Comcast's
18 business.

19 106. Specifically, MaxLinear gave a presentation to Comcast in March 2015
20 wherein it discussed confidential, new technology being developed by MaxLinear
21 and Entropic Inc. MaxLinear's March 2015 presentation specifically referenced that
22 much of this technology was covered by "[a]lmost 2000 issued and pending patents."

23 107. Finally, Comcast has been willfully infringing since at least October
24 2021, when it intentionally misappropriated MaxLinear's technology and related
25 patents by disclosing that information to MaxLinear's competitor.
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1 108. In 2020, Comcast began pursuing full duplex (“FDX”) technology to
2 implement DOCSIS 4.0, which was intended to enable higher speeds for both
3 downstream and upstream communications.

4 109. However, Comcast soon realized that the only then-viable FDX
5 architecture could not be deployed to serve the majority of Comcast’s network.

6 110. Comcast turned to MaxLinear to solve this problem, as MaxLinear was
7 a well-known innovator in the FDX space. Indeed, since at least 2016, Comcast itself
8 acknowledged that MaxLinear was the only company able to deliver viable FDX
9 technology.

10 111. In 2020, after entering into a non-disclosure agreement, MaxLinear
11 shared its confidential FDX technologies with Comcast in the hopes of expanding
12 their business relationship.

13 112. On information and belief, Comcast knew that MaxLinear’s disclosures
14 regarding the FDX technology were confidential and were owned by MaxLinear,
15 including by virtue of the non-disclosure agreement signed by Comcast, as well as
16 the confidentiality designations with which MaxLinear marked its FDX disclosures.

17 113. On information and belief, in October 2021, Comcast nevertheless took
18 credit for MaxLinear’s technology in a published article. *See* Elad Nafshi,
19 *Announcing Another 10G Milestone Amidst a Flurry of Innovation*, Comcast (Oct.
20 14, 2021), <https://tinyurl.com/yphyu6a9>.

21 114. In September 2022, Richard Prodan, one of the Comcast employees who
22 attended and received copies of MaxLinear’s confidential presentation on the design
23 of its FDX-amplifier solution, published an industry paper that described an FDX-
24 amplifier design that was materially identical to the one MaxLinear developed and
25 confidentially shared with Comcast.

26 115. On information and belief, Comcast was aware that its use of
27 MaxLinear’s FDX technology misappropriated MaxLinear’s trade secrets, including
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1 based on the parties' prior business dealings, the NDA, and based on the recent
2 counterclaims filed by MaxLinear against Comcast on December 1, 2023, in the
3 United States District Court for the Southern District of New York, *Comcast Cable*
4 *Communications LLC, et al. v. MaxLinear, Inc.*, Case No. 1:23-cv-04436-AKH (DE
5 88).

6 **4. Comcast's Willful Infringement of Specific Patents-in-Suit**

7 116. Upon information and belief, Comcast substantively reviewed and
8 analyzed Entropic's U.S. Patent No. 8,223,775 (the "'775 Patent"), duly issued on
9 July 17, 2012, from an application filed September 30, 2003, as part of its due
10 diligence prior to investing in Entropic in 2006.

11 117. Accordingly, upon information and belief, no later than the day prior to
12 its latest investment in Entropic in 2006, Comcast knew or had every reason to know
13 that Entropic owned the '775 Patent. Because Comcast knew of the '775 Patent and
14 substantively reviewed its claims, Comcast began willfully infringing the '775 Patent
15 no later than the dates it began offering its cable modem products and services,
16 having knowledge that such use and deployment infringed the '775 Patent.

17 118. As addressed above, Comcast has willfully infringed at least the '362
18 patent, the '826 patent, and the '206 patent through its knowledge gained from the
19 Charter litigation, and was aware of (and substantively analyzed its infringement of)
20 the other Patents-in-Suit no later than the letter sent by Entropic in August 2022.

21 119. Comcast has also willfully infringed at least the '682 Patent as
22 evidenced by its own patents that cite to U.S. Patent No. 9,419,858 (the '858 Patent'),
23 which is the ultimate parent of the '682 Patent. Specifically, Comcast's patents
24 including U.S. Patent No. 11,191,087; U.S. Patent No. 10,582,515; U.S. Patent No.
25 11,758,574 cite the '858 Patent.
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120. Comcast's reference to the '858 Patent, which is closely related to and involves similar technology and functionality as the '682 Patent, evidences Comcast's awareness that it infringes upon '682 Patent.

121. Further, Comcast filed an application for U.S. Patent No. 9,178,765 on July 23, 2013, in the same month that the application for the '682 Patent was filed. On information and belief, Comcast was aware of the '682 Patent based on the investigation it undertook during the application and prosecution process for U.S. Patent No. 9,178,765. Thus, Comcast has willfully infringed the '682 Patent since at least July 23, 2013.

122. Accordingly, Comcast either knew about the Patents-in-Suit, or alternatively engaged in a scheme to be willfully blind to the existence of the Patents-in-Suit.

C. Comcast Willfully Infringed, and Continues to Infringe, Entropic's MoCA Patents⁹

123. Comcast invested in Entropic Inc. once in 2003, and again in 2006.

124. Upon information and belief, Comcast substantively reviewed and analyzed Entropic Inc.'s patents and patent applications related to the Entropic Inc.'s MoCA standard patents as part of its due diligence prior to investing in Entropic Inc.

125. Upon information and belief, the patents and patent applications that Comcast analyzed prior to investing in Entropic include at least the following patents: U.S. Patent No. 7,295,518 (the "'518 Patent"), duly issued on November 13, 2007 from an application filed December 18, 2002, an application filed August 19, 2002 and, *inter alia*, a provisional application filed August 30, 2001; U.S. Patent No. 7,594,249, duly issued on September 22, 2009, from an application filed July 21, 2001, and a provisional application filed May 4, 2001; U.S. Patent No. 7,889,759

⁹ The MoCA Patents are set forth in Entropic's concurrently filed action, *Entropic v. Comcast, et al.*, Case No. 2:23-cv-1048-JWH-KES (C.D. Cal. 2023).

(the “759 Patent”), duly issued on February 15, 2011, from an application filed July 12, 2004, an application filed August 29, 2002, and, *inter alia* a provisional application filed August 30, 2001; U.S. Patent No. 8,085,802, duly issued on December 27, 2011, from an application filed December 2, 2005, and a provisional application filed December 2, 2004; U.S. Patent No. 8,631,450, duly issued on January 14, 2014, from an application filed September 19, 2005, and, *inter alia*, a provisional application filed December 2, 2004; U.S. Patent No. 8,621,539, duly issued on December 31, 2013, from an application filed September 29, 2005, and, *inter alia*, a provisional application filed December 2, 2004; U.S. Patent No. 10,257,566, duly issued on April 9, 2019 from an application filed February 7, 2017, an application filed September 19, 2005, and *inter alia*, a provisional application filed December 2, 2004 (collectively, the “Pre-Investment MoCA Patents”). On information and belief, Comcast knew, based on its own analysis and also potentially statements from Entropic itself, that these patents were standard-essential to MoCA, such that practicing the MoCA standard would infringe these patents.

126. Upon information and belief, no later than the day prior to its latest investment in Entropic in 2006, Comcast knew or had every reason to know that Entropic owned the Pre-Investment MoCA Patents related to the MoCA technology such that deployment of MoCA standard-compliant devices would infringe patents owned by Entropic.

127. Upon information and belief, no later than the day prior to its latest investment in Entropic in 2006, any reasonable commercial party in Comcast’s position, with Comcast’s knowledge, would know that deployment of MoCA standard-compliant devices would infringe on the Pre-Investment MoCA Patents owned by Entropic. On information and belief, Comcast continued to monitor and analyze Entropic’s MoCA-related patents and was aware of later-filed patents that

1 are standard-essential to MoCA simply due to the importance of MoCA to Comcast's
2 business and Comcast's later involvement as a board member of MoCA.

3 128. No later than 2010 and continuing to the present, Comcast has used
4 products that provide signals, programming and content utilizing a data connection
5 carried over a coaxial cable network in accordance with the MoCA standards,
6 including at least the Arris DCX3200, DCX3400, DCX3500, XG1-A, XG1v3,
7 XG1v4, XG2v2, Arris MR150CNM, Pace PR150BNM, Pace PX032ANI, Pace
8 PXD01ANI, Samsung SR150BNM, and similarly operating devices. Because
9 Comcast was already aware of Entropic's Pre-Investment MoCA patents and knew
10 that those patents were standard essential, Comcast knew that its use of these devices
11 would directly infringe the Pre-Investment MoCA patents. Despite this knowledge,
12 Comcast willfully infringed the Pre-Investment MoCA Patents beginning no later
13 than 2010.

14 **1. Comcast's Involvement in MoCA**

15 129. Upon information and belief, Comcast was involved with and/or a
16 member of MoCA from the earliest days of the MoCA, through at least August 2019.
17 Indeed, Comcast was a member of the MoCA board of directors.¹⁰

18 130. As an early and active member of MoCA, Comcast helped to develop
19 the MoCA standard and, therefore, would have been knowledgeable about the
20 technology essential to the practice of that standard.

21 131. Upon information and belief, Comcast was aware that Entropic, its close
22 partner in the endeavor to grow and develop the MoCA standard, owned patents for
23 its technology that was MoCA-standard-compliant.¹¹

24
25
26 ¹⁰ See <https://mocalliance.org/about/faqs.php>.

27 ¹¹ See
28 <https://www.sec.gov/Archives/edgar/data/1227930/000122793015000006/entr2014123110-k.htm>

1 132. Specifically, Comcast would have been aware of at least the '249 Patent,
2 which was filed on July 21, 2001; the '518 Patent, which was filed on December 18,
3 2002; the '759 Patent, which was filed on July 24, 2004; the '450 Patent, which was
4 filed on September 19, 2005; the '539 Patent, which was filed on September 29,
5 2005; and the '802 Patent, which was filed on December 2, 2005. These patents, all
6 of which are essential to the practice of the MoCA standard, were filed during the
7 time that MoCA was being developed by Entropic Inc., Comcast, and others.

8 133. Upon information and belief, no later than the day prior to its latest
9 investment in Entropic in 2006, any reasonable commercial party in Comcast's
10 position with Comcast's knowledge, would perceive a substantial likelihood that
11 deployment of MoCA standard-compliant devices would infringe on Pre-Investment
12 MoCA Patents owned by Entropic.

13 134. On information and belief, Comcast continued to monitor and analyze
14 Entropic's MoCA-related patents and was aware of later-filed patents that are
15 standard-essential to MoCA simply due to the importance of MoCA to Comcast's
16 business and Comcast's later involvement as a board member of the MoCA.

17 135. As a member of the MoCA, Comcast was well aware that Entropic, the
18 owner of the MoCA Patents, was the leading contributor of technology to the
19 standards promulgated by MoCA, which are implicated by the claims of patent
20 infringement herein. Indeed, Comcast was aware that, at the time, Entropic was the
21 only entity capable of developing the technology necessary to practice the MoCA
22 standard.

23 136. Upon information and belief, Comcast knew that MoCA standard-
24 compliant devices had tremendous success, given the public success through Verizon
25 Wireless's deployment of Fios.

26 137. Comcast also willfully infringed the '518 Patent by virtue of its
27 involvement in MoCA. On October 28, 2008, Anton Monk, the Vice President of
28

1 Technology for Entropic Inc., disclosed Entropic Inc.'s ownership of the '518 Patent
2 via email to the MoCA Board of Directors.

3 138. Attached to this email was a document entitled "Disclosure of
4 Intellectual Property," which represents to the MoCA Board of Directors that the
5 '518 Patent was essential to the practice of the MoCA standard.

6 139. On information and belief, Comcast was a member of the Board at the
7 time and therefore received this notice from Entropic.

8 140. Comcast therefore had direct notice of the '518 Patent and that the '518
9 Patent is essential to the practice of the MoCA standard.

10 141. The '759 Patent is a continuation-in-part of the '518 Patent. Given the
11 close relationship between the '759 Patent and the '518 Patent, Comcast also was on
12 notice that the '759 Patent was owned by Entropic Inc. and is essential to the practice
13 of the MoCA standard.

14 142. At the very least, Comcast engaged in a scheme to be willfully blind to
15 the existence of the '759 Patent and the fact that it is essential to the practice of MoCA
16 standard based on its relation to the '518 Patent.

17 **2. Comcast's Relationship with MaxLinear**

18 143. Comcast and MaxLinear, Inc. were engaged in a longstanding
19 commercial relationship for years. Upon information and belief, Comcast knew that
20 MaxLinear, Inc. was a member of MoCA since at least 2011.

21 144. Comcast and MaxLinear, Inc. were both board members of MoCA from
22 at least 2015 through August 2019. By virtue of Comcast's participation in MoCA
23 and its ongoing, extensive use of MoCA standards, on information and belief,
24 Comcast monitored and reviewed the publication and issuance of patents that would
25 be standard-essential, including MaxLinear and Entropic Inc. patents. Because
26 Comcast was using the devices that practiced the MoCA standards, Comcast willfully
27 infringed each MaxLinear and Entropic Inc. patent that was standard-essential to
28

1 MoCA no later than shortly after the issuance of those patents. To the extent Comcast
2 did not engage in such review, it constitutes willful blindness to patent infringement
3 due to Comcast's knowledge of the foundational role and contributions of Entropic
4 Inc. and MaxLinear to the MoCA standards.

5 145. At least as early as January 1, 2020, Comcast knew that MaxLinear
6 owned patents that were essential to practicing the technology embodied in one or
7 more standards promulgated by MoCA.

8 146. Comcast knew that MaxLinear acquired Entropic Inc. and its patents in
9 2015.¹² Because Comcast already knew it was willfully infringing patents owned by
10 Entropic Inc., Comcast therefore knew that it was willfully infringing patents that
11 were standard-essential to MoCA that now were owned by MaxLinear no later than
12 2015.

13 147. No later than the day prior to signing the VSA with MaxLinear, Inc.,
14 Comcast knew or had every reason to know that MaxLinear, Inc. owned patents
15 related to the MoCA technology such that deployment of MoCA standard-compliant
16 devices would infringe on patents owned by MaxLinear. To the extent Comcast did
17 not investigate whether it infringed such patents, Comcast was willfully blind to its
18 infringement of patents owned by its long-time business partner, MaxLinear.

19 148. No later than the day prior to signing the VSA with MaxLinear, Inc.,
20 any reasonable commercial party in Comcast's position, with Comcast's knowledge,
21 would perceive a substantial likelihood that deployment of MoCA standard-
22 compliant devices would infringe patents owned by MaxLinear.

23 149. No later than the day prior to signing the VSA with MaxLinear, Inc.,
24 Comcast knew or had reason to know that MaxLinear owned patents related to non-
25 standardized technologies deployed in the cable television and/or cable internet
26 businesses. To the extent Comcast did not investigate whether it infringed such
27

28 ¹² See https://investors.maxlinear.com/annual-reports?form_type=10-K&year=.

1 patents, Comcast was willfully blind to its infringement of patents owned by its long-
2 time business partner, MaxLinear.

3 150. No later than the day prior to signing the VSA with MaxLinear, Inc.,
4 any reasonable commercial party in Comcast's position, with Comcast's knowledge,
5 would perceive a substantial likelihood that MaxLinear owned patents related to non-
6 standardized technologies deployed in the cable television and/or cable internet
7 businesses, technologies that Comcast uses and deploys.

8 151. Despite this knowledge, Comcast continued to use and deploy devices
9 practicing the MoCA standards and therefore willfully infringed patents owned by
10 MaxLinear, including the MoCA Patents.

11 152. Accordingly, Comcast either knew about the MoCA Patents, or
12 alternatively engaged in a scheme to be willfully blind to the existence of the MoCA
13 Patents. Comcast therefore willfully infringed at least the Pre-Investment MoCA
14 Patents and the later-issued MoCA Patents no later than the day prior to signing the
15 VSA with MaxLinear, Inc.

16 153. Upon information and belief, in addition to the knowledge as set forth
17 above, one of the named inventors of the '008 Patent and '826 Patent, as set forth in
18 Entropic's concurrently filed action *Entropic v. Comcast, et al.*, No. 2:23-cv-1050-
19 JWH-KES, was Patrick Tierney. Mr. Tierney now works at Comcast; thus, upon
20 information and belief, Comcast knew of the aforementioned MoCA Patents as early
21 as the day Mr. Tierney was hired.

22 154. Comcast also attached to its own motion to dismiss a copy of Entropic's
23 letter to Comcast evidencing that Comcast substantively reviewed Entropic's list of
24 patents and analyzed its products' functionality in light of those patents. *See Entropic*
25 *v. Comcast*, No. 2:23-cv-1050-JWH-KES, at Dkt. No. 39-1, Ex. A.

26 155. Comcast also willfully infringed two other MaxLinear patents no later
27 than June 9, 2022. Specifically, during prosecution of Comcast's 17/201,189 patent
28

1 application, the patent examiner cited to MaxLinear, Inc.'s MoCA-related U.S.
2 Patent No. 10,075,333 (the "'333 Patent") in a non-final rejection, which Comcast
3 received on June 9, 2022. Additionally, the '116 Patent was cited during prosecution
4 of Comcast's patent application 16/777,622. The examiner cited MaxLinear, Inc.'s
5 MoCA-related U.S. Patent No. 10,285,116 ("'116 Patent")'s publication in a non-
6 final rejection, which Comcast received on October 16, 2020. On information and
7 belief, no later than June 9, 2022, Comcast substantively reviewed and analyzed the
8 '333 Patent. On information and belief, no later than October 16, 2020, Comcast
9 substantively reviewed and analyzed the '116 Patent. On information and belief,
10 Comcast has willfully infringed the '333 and '116 Patents beginning no later than
11 June 9, 2022, and October 16, 2020, respectively.

12 **3. The ViXS Suit**

13 156. Entropic filed a patent infringement suit against ViXS Systems, Inc. and
14 ViXS USA, Inc. in the Southern District of California, Case No. 13-CV-1102-
15 WQHBGS ("the ViXS Suit"), on May 8, 2013, asserting infringement of the '759
16 Patent and the '518 Patent. Both patents are essential to the standards developed and
17 promulgated by MoCA.

18 157. Upon information and belief, as a member of MoCA, Comcast analyzed
19 the claims in the ViXS Suit and the patents asserted in that case, which included the
20 '759 and '518 Patents.

21 158. Upon information and belief, Comcast analyzed its products'
22 functionality in light of the patents asserted in the ViXS Suit.

23 159. Because Comcast already was using and deploying devices practicing
24 the MoCA standards (and continued to do so), Comcast willfully infringed the '759
25 and '518 Patents no later than May 8, 2013, after substantively analyzing the
26 complaint and the patents asserted in the ViXS suit.
27
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1 160. As addressed above, Comcast has willfully infringed at least the '759
2 Patent and the '518 Patent through its knowledge gained from the ViXS Suit, and
3 was aware of (and substantively analyzed its infringement of) the other MoCA
4 Patents no later than the letter sent by Entropic in August 2022.

5 161. As a member of MoCA, Comcast was well aware that Entropic Inc., the
6 owner of the MoCA Patents in the ViXS Suit, was the leading contributor of
7 technology to the standards promulgated by MoCA, which are implicated by the
8 claims of patent infringement in the ViXS Suit.

9 **D. Comcast has Willfully Infringed Each of The Patents-in-Suit Through**
10 **its Post-Suit Conduct**

11 162. Despite having knowledge of its infringement of the Patents-in-Suit by
12 virtue of Entropic's original Complaint (Feb. 10, 2023), its First Amended Complaint
13 (June 5, 2023), and its infringement contentions (Sept. 15, 2023) in Case No. 01050,
14 Comcast continues to make, use, sell, or offer for sale the Accused Products. Thus,
15 Comcast continues to willfully infringe the Patents-in-Suit.

16 163. Further, on December 1, 2023, MaxLinear, Inc. filed a Counterclaim
17 against Comcast in the Southern District of New York ("SDNY") containing detailed
18 allegations of Comcast's misappropriation of MaxLinear's trade secrets. These
19 allegations shed further light on Comcast's willful infringement of the Patents-in-
20 Suit.

21 164. Even if Comcast had not willfully infringed the Patents-in-Suit,
22 MaxLinear, Inc. provided notice of termination of the VSA to Comcast on May 18,
23 2023, and the VSA is therefore no longer in effect.

24 **1. Original Complaint**

25 165. Before the filing of this Complaint, on February 16, 2023, Comcast
26 accepted service of Entropic's original Complaint alleging infringement of the same
27 Patents-in-Suit. *See* Case No. 01050, DE 1. Entropic hereby incorporates its original
28

1 complaint filed in Case No. 01050 (the “Original Complaint”) into this Complaint by
2 reference.

3 166. Entropic’s Original Complaint specifically described the infringing
4 nature of the Accused Products, which are the same as those described herein.
5 Further, the Original Complaint set forth detailed allegations of how each of the
6 Patents-in-Suit was infringed by one of or more of the Accused Products.

7 167. Comcast thereafter analyzed Entropic’s allegations of infringement and
8 has indeed engaged in substantive discussions with Entropic related to Entropic’s
9 infringement allegations.

10 168. Indeed, after Entropic’s Original Complaint was filed, on information
11 and belief, Comcast again sought indemnification from its suppliers for Entropic’s
12 claims.

13 169. Thus, Comcast was on notice of the basis for Entropic’s infringement
14 claims and sought protection for those claims from its suppliers. On information and
15 belief, Comcast could not have stated grounds for indemnification by specific
16 suppliers unless it had knowledge of the basis for Entropic’s infringement claims, as
17 well as the specific products that were being accused.

18 170. Thus, Comcast has been aware that it infringed the Patents-in-Suit at
19 least since the service of Entropic’s Original Complaint, on February 16, 2023.

20 **2. First Amended Complaint**

21 171. Before the filing of this Complaint, on June 5, 2023, Comcast was
22 served with Entropic’s First Amended Complaint in Case No. 01050 alleging
23 infringement of the same Patents-in-Suit. *See* Case No. 01050, DE 63. Entropic
24 hereby incorporates its First Amended Complaint filed in Case No. 01050 into this
25 Complaint by reference.

26 172. Even more so than its Original Complaint, Entropic’s First Amended
27 Complaint set forth specific allegations of Comcast’s infringement of each of the
28

1 Patents-in-Suit. Entropic included reference to particular patents that Comcast
2 willfully infringed based on its use of particular technology.

3 173. Comcast thereafter analyzed Entropic's allegations of infringement and
4 has indeed engaged in substantive discussions with Entropic related to Entropic's
5 infringement allegations.

6 174. Thus, Comcast has been aware that it infringed the Patents-in-Suit since
7 the service of Entropic's First Amended Complaint, on June 5, 2023.

8 **3. Entropic's Infringement Contentions**

9 175. Further, Entropic's Case No. 01050 infringement contentions, served on
10 September 15, 2023, provided Comcast with additional notice of infringement.
11 Entropic hereby incorporates its Case No. 01050 infringement contentions into this
12 Complaint by reference.

13 176. Entropic's infringement contentions set forth Entropic's infringement
14 positions in detail, and they include charts setting forth how each Accused Product
15 specifically infringed each Asserted Patent.

16 177. In particular, Entropic identified how Comcast's development and use
17 of a PMA system that generates and transacts D3.1 downstream (DS) profiles
18 infringes upon Entropic's '682 Patent.

19 178. Comcast thereafter analyzed the infringement contentions and has
20 engaged in thorough discussions with Entropic regarding the substance of these
21 contentions.

22 179. Thus, Comcast has been aware that it infringed Patents-in-Suit since at
23 least September 15, 2023.

24 180. To date, Comcast has continued its wrongful and willful use of the
25 Patents-in-Suit, and has further continued its attempts to shield itself from liability
26 for its wrongful use thereof.
27
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1 181. Comcast’s continued sale of the Accused Products despite its
2 knowledge of the infringement set forth in Entropic’s Original Complaint, Second
3 Amended Complaint, and Entropic’s Case No. 01050 infringement contentions
4 demonstrates its intent to willfully infringe the Patents-in-Suit.

5 **4. MaxLinear’s SDNY Counterclaim**

6 182. On December 1, 2023, MaxLinear, Inc. filed a Counterclaim against
7 Comcast, alleging that Comcast breached the nondisclosure agreement (the “NDA”)
8 it entered into with MaxLinear, Inc. and misappropriated MaxLinear, Inc.’s trade
9 secrets. *See Comcast Cable Communications Management, LLC, et al. v. MaxLinear,*
10 *Inc.*, Case No. 1:23-cv-04436-AKH, DE 88 (S.D.N.Y. Dec. 1, 2023). This
11 Counterclaim is hereby incorporated into this Complaint by reference.

12 183. In its Counterclaim, MaxLinear, Inc. alleges that Comcast intentionally,
13 and in violation of the NDA, capitalized off of MaxLinear’s breakthrough FDX
14 technology by first convincing MaxLinear to disclose that technology to Comcast,
15 and then by taking credit for technology and divulging the information it learned to
16 MaxLinear’s competitor.

17 184. Specifically, Comcast knowingly published aspects of MaxLinear’s
18 FDX amplifier design as its own through its employee, Richard Prodan; disclosed the
19 amplifier design to MaxLinear’s competitor; and paid the competitor to create a
20 functionally identical amplifier for Comcast.

21 185. MaxLinear goes on to allege that, while Comcast has previously hid
22 behind Section 7.3 of the VSA—an agreement which Comcast itself drafted—
23 Comcast’s knowing misappropriation of MaxLinear’s FDX-amplifier trade secret
24 technology has rendered this provision irrelevant.

25 **5. Termination of the VSA**

26 186. The VSA’s Term expires on July 31, 2026. However, the VSA permits
27 MaxLinear, Inc. to terminate prior to July 31, 2026, at any time, with 90 days’ notice.
28

1 187. Upon information and belief, MaxLinear, Inc. sent notice to Comcast of
2 termination of the VSA by way of letter on or about May 18, 2023.

3 188. Thus, the VSA has been terminated since no later than August 16, 2023.
4 The VSA is therefore no longer in effect.

5 **JURISDICTION AND VENUE**

6 189. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331
7 and 1338(a) because the claims herein arise under the patent laws of the United
8 States, 35 U.S.C. § 1 *et seq.*, including 35 U.S.C. § 271.

9 190. Venue in this District is proper pursuant to 28 U.S.C. § 1400(b), because
10 Comcast has regular and established places of business in this District. The
11 defendants, by themselves and/or through their agents, have committed acts of patent
12 infringement within the State of California and within this District by using, selling,
13 offering for sale, and/or leasing various telecommunication services products and
14 services.

15 191. This Court has general personal jurisdiction over Comcast Corp.
16 because it conducts systematic and regular business within the State of California by,
17 *inter alia* providing cable television, internet, and phone services to businesses and
18 residents throughout the state. Comcast Corp.'s website states that, "Comcast is
19 deeply committed to California, where our nearly 5,000 employees serve 3.4 million
20 customers throughout the state."¹³

21 192. Upon information and belief, Comcast Management has a regular and
22 established place of business in the State of California including at least at 3055
23 Comcast Place, Livermore, California 94551.

24
25
26
27 ¹³ See
28 <https://california.comcast.com/about/#:%7E:text=Comcast%20is%20deeply%20committed%20to,smart%20home%E2%80%9D%20and%20phone%20service.>

1 193. The Court has personal jurisdiction over Comcast Corp., Comcast
2 Communications and Comcast Management because they have committed acts of
3 infringement within the State of California and within this District through, for
4 example, providing through their wholly owned subsidiaries, “Comcast” and
5 “Xfinity” branded products and services, including, Xfinity set top boxes (“STBs”)
6 and Xfinity digital video, audio, and other content services to customers. Comcast
7 provides cable television and internet services (“Accused Services”) via the lease,
8 sale, and/or distribution of cable modems and set top boxes both online and from
9 Comcast stores in this District. For example, Comcast has and continues to sell, lease,
10 and/or distribute the Technicolor TC8717 cable modem, Technicolor CGM4140
11 cable modem, Technicolor CGM4331 cable modem, and products that operate in a
12 similar manner (“Accused Cable Modem Products”), as well as the Arris
13 AX013ANC STB, Arris AX013ANM STB, Arris AX014ANC STB, Arris
14 AX014ANM STB, Arris MX011ANC STB, Arris MX011ANM STB, Pace
15 PX001ANC STB, Pace PX013ANC STB, Pace PX013ANM STB, Pace PX022ANC
16 STB, Pace PX022ANM STB, Samsung SX022ANC STB, Samsung SX022ANM
17 STB, and products that operate in a similar manner (“Accused Set Top Products”).¹⁴

18 194. Upon information and belief, Comcast Corp., Comcast
19 Communications, and Comcast Management, by themselves and/or through their
20 agents, offer various telecommunication services throughout the United States.
21 Comcast operates and maintains a nationwide television and data network through
22 which it sells, leases, and offers for sale products and services, including the Accused
23

24
25 ¹⁴ Entropic provided its initial infringement contentions in Case No. 01050 for the
26 ’775, ’690, ’008, ’362, ’826, ’682, ’866, and ’206 Patents on September 15, 2023.
27 Entropic provided its initial infringement contentions in Case No. 01050 for the ’438
28 and ’275 Patents on November 3, 2023. This Complaint reflects the initial
infringement contentions, which include references to certain documents provided in
discovery in Case No. 01050 to Comcast by Entropic.

1 Services, Accused Cable Modem Products and Accused Set Top Products, to
2 businesses, consumers, and government agencies. Through its subsidiaries, Comcast
3 Corp. offers to sell, sells, and provides “Comcast” and “Xfinity” branded products
4 and services, including cable modems, set top boxes, and digital video, audio, and
5 other content services to customers. Subscribers to Comcast’s television services
6 receive one or more receivers and/or set-top boxes within this District. Subscribers
7 to Comcast’s internet services receive one or more cable modems within this District.

8 195. Upon information and belief, those services are provided through and
9 using the Accused Cable Modem Products and Accused Set Top Products.

10 196. Upon information and belief, Comcast Corp., Comcast
11 Communications, and Comcast Management, by themselves and/or through their
12 agents, Comcast Santa Maria and/or Comcast Lompoc, operate their businesses
13 through *inter alia* offices, warehouses, storefronts, and/or other operational locations
14 within this District, including, for example, at the Xfinity by Comcast stores located
15 in this District at 685 East Betteravia Rd., Santa Maria, California 93454; and 1145
16 N. H Street, Suite B, Lompoc, California 93436. Comcast holds out these locations
17 as its own through the use of branding on the locations themselves.

18 197. Comcast lists these Xfinity by Comcast stores on its website and holds
19 them out as places where customers can obtain the Accused Services, Accused Cable
20 Modem Products, and Accused Set Top Products.

21 198. Upon information and belief, one or more of the defendants owns and/or
22 leases the premises where these Xfinity by Comcast stores are located.

23 199. Upon information and belief, these Xfinity by Comcast stores are staffed
24 by persons directly employed by Comcast, many of whom live in this District.

25 200. Upon information and belief, one or more of the defendants has engaged
26 in regular and established business at physical places within this District such as at
27 these two Xfinity by Comcast stores.
28

1 201. Upon information and belief, Comcast employs and/or contracts with
2 persons and directs them to install, service, repair, and/or replace equipment, as
3 appropriate, in this District.

4 202. Upon information and belief, in each of these stores and/or service
5 centers, Comcast owns and stores equipment such as cable modems and set top boxes
6 and demonstrates services provided via those products to Comcast customers.

7 203. Comcast has adopted and ratified the Comcast and Xfinity-branded
8 locations identified in this District. The Comcast website advertises Comcast service
9 packages available from Comcast-authorized retailers in this District, and
10 prospective employees can find Comcast job listings in this District. Furthermore,
11 the “corporate” section of Comcast’s main website has a section containing “Special
12 Information Regarding California Residents’ Privacy Rights,” which demonstrates
13 that Comcast is purposefully holding itself out as providing products and services in
14 California.

15 204. Upon information and belief, Comcast Corp., and/or Comcast
16 Communications, by themselves and/or through their agent, Comcast Management,
17 provides the Accused Services throughout the United States and in this District.

18 205. Upon information and belief, Comcast Corp. and/or Comcast
19 Management, by themselves, and/or through their agent, Comcast Communications,
20 sells, and offers for sale, and provides the Accused Services, the Accused Cable
21 Modem Products, and the Accused Set Top Products throughout the United States
22 and in this District.

23 206. The Accused Services are available for subscription from various
24 physical stores, including those at 685 East Betteravia Rd., Santa Maria, California,
25 93454; and 1145 N. H Street, Suite B, Lompoc, California 93436.

26 207. The devices, including the Accused Cable Modem Products and the
27 Accused Set Top Products provided by Comcast to supply the Accused Services, are
28

1 provided to customers in this District and may be obtained by customers from
2 physical locations in this District, including those at 685 East Betteravia Rd., Santa
3 Maria, California, 93454; and 1145 N. H Street, Suite B, Lompoc, California 93436.

4 208. Venue is further proper because Comcast has committed and continues
5 to commit acts of patent infringement in this District, including making, using,
6 offering to sell, and/or selling Accused Services, Accused Cable Modem Products
7 and Accused Set Top Products in this District, and/or importing the Accused Cable
8 Modem Products and Accused Set Top Products into, and thereafter providing
9 Accused Services in, this District, including by Internet sales and sales via retail and
10 wholesale stores. Furthermore, for example, Comcast deploys Accused Cable
11 Modem Products, and Accused Set Top Products to many thousands of locations
12 (e.g., customer premises) in this District and subsequently, by means of those
13 instrumentalities, uses the claimed inventions at those locations in this District.
14 Comcast infringes by inducing and contributing to acts of patent infringement in this
15 District and/or committing at least a portion of any other infringement alleged herein
16 in this District.

17 209. Comcast continues to conduct business in this District, including the
18 acts and activities described in the preceding paragraph.

19
20 **COUNT I**

21 **(Infringement of the '775 Patent)**

22 210. Entropic incorporates by reference each allegation of the paragraphs
23 above as if fully set forth herein.

24 211. Entropic served infringement contentions in Case No. 01050, which
25 included a claim chart for the '775 Patent, on September 15, 2023.

26 212. The '775 Patent duly issued on July 17, 2012 from an application filed
27 September 30, 2003.
28

1 213. Entropic owns all substantial rights, interest, and title in and to the '775
2 Patent, including the sole and exclusive right to prosecute this action and enforce the
3 '775 Patent against infringers and to collect damages for all relevant times.

4 214. The '775 Patent generally describes a partitioned cable modem that
5 performs cable modem functions and data and home networking functions.
6 Functionally partitioning a cable modem to perform cable modem functions and data
7 and home networking functions enables a cable modem to incorporate a variety of
8 enhanced functions. A true and accurate copy of the '775 Patent is attached hereto as
9 Exhibit 1.

10 215. The '775 Patent is directed to patent-eligible subject matter pursuant to
11 35 U.S.C. § 101.

12 216. The '775 Patent is valid and enforceable, and presumed as such,
13 pursuant to 35 U.S.C. § 282.

14 217. Comcast deploys one or more of the Accused Cable Modem Products
15 in connection with operating and providing the Accused Services.

16 218. The Accused Cable Modem Products deployed by Comcast to customer
17 premises remain the property of Comcast while deployed.

18 219. The Accused Cable Modem Products operate while deployed in a
19 manner controlled and intended by Comcast.

20 220. As set forth in the infringement contentions served on Comcast in Case
21 No. 01050 on September 15, 2023 (attached hereto as Exhibit 2),¹⁵ Comcast has
22 directly infringed and is infringing at least Claims 18 and 19 of the '775 Patent by
23 using, importing, selling, and/or offering for sale the Accused Cable Modem
24 Products and/or the Accused Services.

25
26
27 ¹⁵ The original claim chart for this patent was filed with this Court at Case No.
28 01050, DE 63.

1 221. Each aspect of the functioning of the Accused Cable Modem Products
2 described in the claim chart operates while deployed to customer premises in a
3 manner controlled and intended by Comcast.

4 222. Comcast provides no software, support, or other facility to customers to
5 modify any aspect of the functioning described in the claim chart of the Accused
6 Cable Modem Products while deployed to customer premises.

7 223. Comcast directly infringes at least Claims 18 and 19 of the '775 Patent
8 by using, importing, selling, and/or offering for sale the Accused Cable Modem
9 Products (for example, the Technicolor CGM4140 cable modem) and/or the Accused
10 Services (for example, utilizing cable modem functions).

11 224. The use of the Accused Cable Modem Products by Comcast to, for
12 example, demonstrate products in brick-and-mortar stores at 685 East Betteravia Rd.,
13 Santa Maria, California, 93454; and 1145 N. H Street, Suite B, Lompoc, California
14 93436, or to, for example, test those products, constitute acts of direct infringement
15 of at least Claims 18 and 19 of the '775 Patent.

16 225. The VSA does not in any way preclude Entropic from asserting this
17 claim, including because this patent was owned by MaxLinear, LLC at the time of
18 the execution of the VSA, and MaxLinear, LLC was not a party to that agreement
19 and did not encumber any of its patents thereby.

20 226. Comcast has known of or has been willfully blind to the '775 Patent
21 since before, and no later than the date of, its acceptance of service of the Original
22 Complaint in Case No. 015050 on February 16, 2023.

23 227. Comcast has known of or has been willfully blind to the '775 Patent
24 since before, and no later than the date of, its acceptance of service of the First
25 Amended Complaint in Case No. 015050 on June 5, 2023.

1 228. Comcast has known of or has been willfully blind to the '775 Patent
2 since before, and no later than the date of, its acceptance of service of Entropic's
3 infringement contentions in Case No. 015050 on September 15, 2023.

4 229. Comcast has known of or has been willfully blind to the '775 Patent
5 since no later than the day before signing the VSA with MaxLinear, Inc.

6 230. Comcast has known of or has been willfully blind to the '775 Patent
7 since no later than the day before investing in Entropic Inc. in or about 2006.

8 231. Comcast has known of the '775 Patent no later than its receipt of
9 Entropic's communication sent to Comcast on August 9, 2022.

10 232. Comcast has been aware that it infringes the '775 Patent since well
11 before, and no later than the date of, its receipt of Entropic's August 9, 2022,
12 communication, attached as Exhibit 17. Since obtaining knowledge of the '775 Patent
13 and its infringing activities, Comcast has failed to cease its infringing activities.

14 233. Customers and subscribers of Comcast infringe at least Claims 18 and
15 19 of the '775 Patent by using the claimed system, at least during the use of the
16 Accused Cable Modem Products.

17 234. Comcast actively induces customers' direct infringement. For example,
18 Comcast actively induces infringement of at least Claims 18 and 19 of the '775 Patent
19 by providing the Accused Cable Modem Products to Comcast customers with
20 specific instructions and/or assistance (including installation) regarding the use of the
21 Accused Cable Modem Products to infringe the '775 Patent in accordance with the
22 ordinary course of operation through the provision of the Accused Services. For at
23 least the above-listed reasons, Comcast aids, instructs, supports, and otherwise acts
24 with the intent to cause an end user to use the Accused Cable Modem Products to
25 infringe at least Claims 18 and 19 of the '775 Patent.

1 235. Comcast contributes to the customers' direct infringement. Comcast
2 provides apparatuses, namely the Accused Cable Modem Products, that are used by
3 customers to directly infringe at least Claims 18 and 19 of the '775 Patent.

4 236. The Accused Cable Modem Products have no substantial non-infringing
5 uses. When an end user uses the Accused Cable Modem Products to receive the
6 Accused Services, the end user directly infringes at least Claims 18 and 19 of the
7 '775 Patent.

8 237. The Accused Cable Modem Products are especially made or especially
9 adapted for use in an infringing manner. Comcast's inducement of, and contribution
10 to, the direct infringement of at least Claims 18 and 19 of the '775 Patent is
11 continuous and ongoing through acts such as providing the Accused Cable Modem
12 Products to Comcast customers, which enables those customers to receive the
13 Accused Services; Comcast's provision of the Accused Services; and technical
14 assistance provided by Comcast for equipment it provides to its customers in support
15 of the provision of the Accused Services.

16 238. Comcast's infringement of the '775 Patent is, has been, and continues
17 to be willful, intentional, deliberate, and/or in conscious disregard for Entropic's
18 rights under the patent.

19 239. Entropic has been damaged as a result of the infringing conduct alleged
20 above. Comcast is liable to Entropic in an amount that compensates Entropic for
21 Comcast's infringement, which by law cannot be less than a reasonable royalty,
22 together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

23 240. Entropic is aware of no obligation to mark any instrumentality with the
24 '775 Patent in accordance with 35 U.S.C. § 287.

25
26 **COUNT II**
27 **(Infringement of the '690 Patent)**
28

1 241. Entropic incorporates by reference each allegation above as if fully set
2 forth herein.

3 242. Entropic served infringement contentions in Case No. 015050, which
4 included a claim chart for the '690 Patent on September 15, 2023.

5 243. The '690 Patent duly issued on October 9, 2012 from an application
6 filed December 10, 2009, and, *inter alia* a provisional application filed May 19, 2009
7 and a provisional application filed December 15, 2008.

8 244. Entropic owns all substantial rights, interest, and title in and to the '690
9 Patent, including the sole and exclusive right to prosecute this action and enforce the
10 '690 Patent against infringers and to collect damages for all relevant times.

11 245. The '690 Patent generally describes the process of generating probe
12 transmissions in response to a request from a receiving node of a network, wherein
13 the probe request specifies a plurality of parameters that specify content payload of
14 the probe transmission, and a second node to receive the probe transmission, which
15 enhances flexibility and therefore, improves the receiving node's ability to efficiently
16 recognize the precise form of the transmitted probe. A true and accurate copy of the
17 '690 Patent is attached hereto as Exhibit 3.

18 246. The '690 Patent is directed to patent-eligible subject matter pursuant to
19 35 U.S.C. § 101.

20 247. The '690 Patent is valid and enforceable, and presumed as such,
21 pursuant to 35 U.S.C. § 282.

22 248. Comcast deploys one or more of the Accused Cable Modem Products
23 in connection with operating and providing the Accused Services.

24 249. The Accused Cable Modem Products deployed by Comcast to customer
25 premises remain the property of Comcast while deployed.

26 250. The Accused Cable Modem Products operate while deployed in a
27 manner controlled and intended by Comcast.
28

1 251. As set forth in the infringement contentions served on Comcast in Case
2 No. 01050 on September 15, 2023 (attached hereto as Exhibit 4),¹⁶ Comcast has
3 directly infringed and is infringing at least Claims 7 and 8 of the '690 Patent by using,
4 importing, selling, and/or offering for sale the Accused Cable Modem Products,
5 and/or the Accused Services.

6 252. Each aspect of the functioning of the Accused Cable Modem Products
7 described in the claim chart operates while deployed to customer premises in a
8 manner controlled and intended by Comcast.

9 253. Comcast provides no software, support, or other facility to customers to
10 modify any aspect of the functioning described in the claim chart of the Accused
11 Cable Modem Products while deployed to customer premises.

12 254. Comcast directly infringes at least Claims 7 and 8 of the '690 Patent by
13 using, importing, selling, and/or offering for sale the Accused Cable Modem
14 Products (for example, the Technicolor CGM4140 cable modem) and/or the Accused
15 Services (for example, performing bidirectional communication with cable modems).

16 255. The use of the Accused Services by Comcast to, for example,
17 demonstrate products in brick-and-mortar stores at 685 East Betteravia Rd., Santa
18 Maria, California, 93454; and 1145 N. H Street, Suite B, Lompoc, California 93436,
19 or to, for example, test those products, constitute acts of direct infringement of at
20 least Claims 7 and 8 of the '690 Patent.

21 256. The VSA does not in any way preclude Entropic from asserting this
22 claim, including because this patent was owned by MaxLinear, LLC at the time of
23 the execution of the VSA, and MaxLinear, LLC was not a party to that agreement
24 and did not encumber any of its patents thereby.

27 ¹⁶ The original claim chart for this patent was filed with this Court at Case No.
28 01050, DE 63.

1 257. Comcast has known of or has been willfully blind to the '690 Patent
2 since before, and no later than the date of, its acceptance of service of the Original
3 Complaint in Case No. 01050 on February 16, 2023.

4 258. Comcast has known of or has been willfully blind to the '690 Patent
5 since before, and no later than the date of, its acceptance of service of the First
6 Amended Complaint in Case No. 01050 on June 5, 2023.

7 259. Comcast has known of or has been willfully blind to the '690 Patent
8 since before, and no later than the date of, its acceptance of service of Entropic's
9 infringement contentions in Case No. 01050 on September 15, 2023.

10 260. Comcast has known of or has been willfully blind to the '690 Patent no
11 later than the day before signing the VSA with MaxLinear, Inc.

12 261. Comcast has known of or has been willfully blind to the '690 Patent
13 since no later than the date of its receipt of Entropic's communication sent to Comcast
14 on August 9, 2022.

15 262. Comcast has been aware that it infringes the '690 Patent since well
16 before, and no later than the date of, Entropic's August 9, 2022, communication,
17 attached as Exhibit 17. Since obtaining knowledge of the '690 Patent and its
18 infringing activities, Comcast has failed to cease its infringing activities.

19 263. Customers and subscribers of Comcast infringe at least Claims 7 and 8
20 of the '690 Patent by using the claimed method, at least during receipt of the Accused
21 Services utilizing, for example, the Accused Cable Modem Products.

22 264. Comcast actively induces customers' direct infringement. For example,
23 Comcast actively induces infringement of at least Claims 7 and 8 of the '690 Patent
24 by providing the Accused Cable Modem Products to Comcast customers with
25 specific instructions and/or assistance (including installation) regarding the use of the
26 Accused Cable Modem Products to infringe the '690 Patent in accordance with the
27 ordinary course of operation through the provision of the Accused Services. Comcast
28

1 provides the cable modem functions claimed by the '690 Patent via the Accused
2 Services, which enable and induce its customers to directly infringe the '690 Patent.
3 For at least the above-listed reasons, Comcast aids, instructs, supports, and otherwise
4 acts with the intent to cause an end user to use the Accused Cable Modem Products
5 to infringe at least Claims 7 and 8 of the '690 Patent.

6 265. Comcast contributes to the customers' direct infringement. Comcast
7 provides apparatuses, namely the Accused Cable Modem Products, that are used by
8 customers to directly infringe at least Claims 7 and 8 of the '690 Patent.

9 266. The Accused Cable Modem Products have no substantial non-infringing
10 uses. When an end user uses the Accused Cable Modem Products to receive the
11 Accused Services, the end user directly infringes at least Claims 7 and 8 of the '690
12 Patent. The Accused Cable Modem Products are especially made or especially
13 adapted for use in an infringing manner.

14 267. Comcast's inducement of, and contribution to, the direct infringement
15 of at least Claims 7 and 8 of the '690 Patent is continuous and ongoing through acts
16 such as providing the Accused Cable Modem Products to Comcast customers, which
17 enables those customers to receive the Accused Services; Comcast's provision of the
18 Accused Services; and technical assistance provided by Comcast for equipment it
19 provides to its customers in support of the provision of the Accused Services.

20 268. Comcast's infringement of the '690 Patent is, has been, and continues
21 to be willful, intentional, deliberate, and/or in conscious disregard for Entropic's
22 rights under the patent.

23 269. Entropic has been damaged as a result of the infringing conduct alleged
24 above. Comcast is liable to Entropic in an amount that compensates Entropic for
25 Comcast's infringement, which by law cannot be less than a reasonable royalty,
26 together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
27
28

1 270. No apparatus claims of the '690 Patent are presently asserted.
2 Accordingly, there is no duty to mark pursuant to 35 U.S.C. § 287.

3
4 **COUNT III**
5 **(Infringement of the '008 Patent)**

6 271. Entropic incorporates by reference each allegation of the paragraphs
7 above as if fully set forth herein.

8 272. Entropic served infringement contentions in Case No. 01050, which
9 included a claim chart for the '008 Patent on September 15, 2023.

10 273. The '008 Patent duly issued on July 29, 2014, from an application filed
11 September 10, 2012, and, *inter alia* a provisional application filed September 8, 2011.

12 274. Entropic owns all substantial rights, interest, and title in and to the '008
13 Patent, including the sole and exclusive right to prosecute this action and enforce the
14 '008 Patent against infringers and to collect damages for all relevant times.

15 275. The '008 Patent generally describes a system that receives a signal
16 having a plurality of channels, digitizes the received signal, and reports certain signal
17 characteristics to the source of the received signal. A true and accurate copy of the
18 '008 Patent is attached hereto as Exhibit 5.

19 276. The '008 Patent is directed to patent-eligible subject matter pursuant to
20 35 U.S.C. § 101.

21 277. The '008 Patent is valid and enforceable, and presumed as such,
22 pursuant to 35 U.S.C. § 282.

23 278. Comcast deploys one or more of the Accused Cable Modem Products
24 and Accused Set Top Products in connection with operating and providing the
25 Accused Services.

26 279. The Accused Cable Modem Products and Accused Set Top Products
27 deployed by Comcast to customer premises remain the property of Comcast while
28 deployed.

1 280. The Accused Cable Modem Products and Accused Set Top Products
2 operate while deployed in a manner controlled and intended by Comcast.

3 281. As set forth in the infringement contentions served on Comcast in Case
4 No. 01050 on September 15, 2023 (attached hereto as Exhibit 6),¹⁷ Comcast has
5 directly infringed and is infringing at least Claims 1-6, 9, and 10 of the '008 Patent
6 by using, importing, selling, and/or offering for sale the Accused Cable Modem
7 Products and Accused Set Top Products and/or the Accused Services.

8 282. Each aspect of the functioning of the Accused Cable Modem Products
9 and Accused Set Top Products described in the claim chart operates while deployed
10 to customer premises in a manner controlled and intended by Comcast.

11 283. Comcast provides no software, support, or other facility to customers to
12 modify any aspect of the functioning described in the claim chart of the Accused
13 Cable Modem Products and Accused Set Top Products while deployed to customer
14 premises.

15 284. Comcast directly infringes at least Claims 1-6, 9, and 10 of the '008
16 Patent by using, importing, selling, and/or offering for sale the Accused Cable
17 Modem Products (for example, the Technicolor CGM4140 cable modem), Accused
18 Set Top Products (for example, the Arris AX013ANM STB) and/or the Accused
19 Services (for example, monitoring signals by the Accused Set Top Products).

20 285. The use of the Accused Cable Modem Products and Accused Set Top
21 Products by Comcast to, for example, demonstrate products in brick-and-mortar
22 stores at 685 East Betteravia Rd., Santa Maria, California, 93454; and 1145 N. H
23 Street, Suite B, Lompoc, California 93436, or to, for example, test those products,
24 constitute acts of direct infringement of at least Claims 1-6, 9, and 10 of the '008
25 Patent.

26
27 ¹⁷ The original claim chart for this patent was filed with this Court at Case No.
28 01050, DE 63.

1 286. Comcast has known of or has been willfully blind to the '008 Patent
2 since before, and no later than the date of, its acceptance of service of the Original
3 Complaint in Case No. 01050 on February 16, 2023.

4 287. Comcast has known of or has been willfully blind to the '008 Patent
5 since before, and no later than the date of, its acceptance of service of the First
6 Amended Complaint in Case No. 01050 on June 5, 2023.

7 288. Comcast has known of or has been willfully blind to the '008 Patent
8 since before, and no later than the date of, its acceptance of service of Entropic's
9 infringement contentions in Case No. 01050 on September 15, 2023.

10 289. Comcast has known of or has been willfully blind to the '008 Patent no
11 later than the day before signing the VSA with MaxLinear, Inc.

12 290. Comcast has known of or has been willfully blind to the '008 Patent
13 since before the August 9, 2022, communication from Entropic.

14 291. Comcast has been aware that it infringes the '008 Patent since well
15 before, and no later than the date of, Entropic's August 9, 2022, communication,
16 attached as Exhibit 17. Since obtaining knowledge of the '008 Patent and its
17 infringing activities, Comcast has failed to cease its infringing activities.

18 292. Customers and subscribers of Comcast infringe at least Claims 1-6, 9,
19 and 10 of the '008 Patent by using the claimed system, at least during the use of the
20 Accused Cable Modem Products and Accused Set Top Products.

21 293. Comcast actively induces customers' direct infringement. For example,
22 Comcast actively induces infringement of at least Claims 1-6, 9, and 10 of the '008
23 Patent by providing the Accused Cable Modem Products and Accused Set Top
24 Products to Comcast customers with specific instructions and/or assistance
25 (including installation) regarding the use of the Accused Cable Modem Products and
26 Accused Set Top Products to infringe the '008 Patent in accordance with the ordinary
27 course of operation through the provision of the Accused Services. Comcast provides
28

1 the full band digital tuning and signal monitoring functions claimed by the '008
2 Patent via the Accused Services, which enable and induce its customers to directly
3 infringe the '008 Patent. For at least the above-listed reasons, Comcast aids, instructs,
4 supports, and otherwise acts with the intent to cause an end user to use the Accused
5 Cable Modem Products and Accused Set Top Products to infringe at least Claims 1-
6 6, 9, and 10 of the '008 Patent.

7 294. Comcast contributes to the customers' direct infringement. Comcast
8 provides apparatuses, namely the Accused Cable Modem Products and Accused Set
9 Top Products, that are used by customers to directly infringe at least Claims 1-6, 9,
10 and 10 of the '008 Patent.

11 295. The Accused Cable Modem Products and Accused Set Top Products
12 have no substantial non-infringing uses. When an end user uses the Accused Cable
13 Modem Products and Accused Set Top Products to receive the Accused Services, the
14 end user directly infringes at least Claims 1-6, 9, and 10 of the '008 Patent. The
15 Accused Cable Modem Products and Accused Set Top Products are especially made
16 or especially adapted for use in an infringing manner.

17 296. Comcast's inducement of, and contribution to, the direct infringement
18 of at least Claims 1-6, 9, and 10 of the '008 Patent is continuous and ongoing through
19 acts such as providing the Accused Cable Modem Products and Accused Set Top
20 Products to Comcast customers, which enables those customers to receive the
21 Accused Services; Comcast's provision of the Accused Services; and technical
22 assistance provided by Comcast for equipment it provides to its customers in support
23 of the provision of the Accused Services.

24 297. Comcast's infringement of the '008 Patent is, has been, and continues
25 to be willful, intentional, deliberate, and/or in conscious disregard for Entropic's
26 rights under the patent.

1 306. The '362 Patent is valid and enforceable, and presumed as such,
2 pursuant to 35 U.S.C. § 282.

3 307. Comcast deploys one or more of the Accused Set Top Products in
4 connection with operating and providing the Accused Services.

5 308. The Accused Set Top Products deployed by Comcast to customer
6 premises remain the property of Comcast while deployed.

7 309. The Accused Set Top Products operate while deployed in a manner
8 controlled and intended by Comcast.

9 310. As set forth in the infringement contentions served on Comcast in Case
10 No. 01050, on September 15, 2023 (attached hereto as Exhibit 8),¹⁸ Comcast has
11 directly infringed and is infringing at least Claims 11 and 12 of the '362 Patent by
12 using, importing, selling, and/or offering for sale the Accused Set Top Products
13 and/or the Accused Services.

14 311. Each aspect of the functioning of the Accused Set Top Products
15 described in the claim chart operates while deployed to customer premises in a
16 manner controlled and intended by Comcast.

17 312. Comcast provides no software, support, or other facility to customers to
18 modify any aspect of the functioning described in the claim chart of the Accused Set
19 Top Products while deployed to customer premises.

20 313. Comcast directly infringes at least Claims 11 and 12 of the '362 Patent
21 by using, importing, selling, and/or offering for sale the Accused Set Top Products
22 (for example, the Arris AX013ANM STB) and/or the Accused Services (for example,
23 digitizing and selecting desired television channels provided by Comcast).

24 314. The use of the Accused Set Top Products by Comcast to, for example,
25 demonstrate products in brick-and-mortar stores at 685 East Betteravia Rd., Santa
26

27 ¹⁸ The original claim chart for this patent was filed with this Court at Case No.
28 01050, DE 63.

1 Maria, California, 93454; and 1145 N. H Street, Suite B, Lompoc, California 93436,
2 or to, for example, test those products, constitute acts of direct infringement of at
3 least Claims 11 and 12 of the '362 Patent.

4 315. Comcast has known of or has been willfully blind to the '362 Patent
5 since before, and no later than the date of, its acceptance of service of the Original
6 Complaint in Case No. 01050 on February 16, 2023.

7 316. Comcast has known of or has been willfully blind to the '362 Patent
8 since before, and no later than the date of, its acceptance of service of the First
9 Amended Complaint in Case No. 01050 on June 5, 2023.

10 317. Comcast has known of or has been willfully blind to the '362 Patent
11 since before, and no later than the date of, its acceptance of service of Entropic's
12 infringement contentions in Case No. 01050 on September 15, 2023.

13 318. Comcast has known of or has been willfully blind to the '362 Patent no
14 later than the day before signing the VSA with MaxLinear, Inc.

15 319. Comcast has known of or has been willfully blind to the '362 Patent
16 since before the August 9, 2022, communication from Entropic.

17 320. Comcast has been aware that it infringes the '362 Patent since well
18 before, and no later than the date of, its receipt of Entropic's August 9, 2022,
19 communication, attached as Exhibit 17. Since obtaining knowledge of the '362 Patent
20 and its infringing activities, Comcast has failed to cease its infringing activities.

21 321. Customers and subscribers of Comcast infringe at least Claims 11 and
22 12 of the '362 Patent by using the claimed system, at least during the use of the
23 Accused Set Top Products.

24 322. Comcast actively induces customers' direct infringement. For example,
25 Comcast actively induces infringement of at least Claims 11 and 12 of the '362 Patent
26 by providing the Accused Set Top Products to Comcast customers with specific
27 instructions and/or assistance (including installation) regarding the use of the
28

1 Accused Set Top Products to infringe the '362 Patent in accordance with the ordinary
2 course of operation through the provision of the Accused Services. Comcast provides
3 the television channel digitization, selection, and output functions claimed by the
4 '362 Patent via the Accused Services, which enable and induce its customers to
5 directly infringe the '362 Patent. For at least the above-listed reasons, Comcast aids,
6 instructs, supports, and otherwise acts with the intent to cause an end user to use the
7 Accused Set Top Products to infringe at least Claims 11 and 12 of the '362 Patent.

8 323. Comcast contributes to the customers' direct infringement. Comcast
9 provides apparatuses, namely the Accused Set Top Products, that are used by
10 customers to directly infringe at least Claims 11 and 12 of the '362 Patent.

11 324. The Accused Set Top Products have no substantial non-infringing uses.
12 When an end user uses the Accused Set Top Products to receive the Accused
13 Services, the end user directly infringes at least Claims 11 and 12 of the '362 Patent.
14 The Accused Set Top Products are especially made or especially adapted for use in
15 an infringing manner.

16 325. Comcast's inducement of, and contribution to, the direct infringement
17 of at least Claims 11 and 12 of the '362 Patent is continuous and ongoing through
18 acts such as providing the Accused Set Top Products to Comcast customers, which
19 enables those customers to receive the Accused Services; Comcast's provision of the
20 Accused Services; and technical assistance provided by Comcast for equipment it
21 provides to its customers in support of the provision of the Accused Services.

22 326. Comcast's infringement of the '362 Patent is, has been, and continues
23 to be willful, intentional, deliberate, and/or in conscious disregard for Entropic's
24 rights under the patent.

25 327. Entropic has been damaged as a result of the infringing conduct alleged
26 above. Comcast is liable to Entropic in an amount that compensates Entropic for
27
28

1 Comcast's infringement, which by law cannot be less than a reasonable royalty,
2 together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

3 328. No apparatus claims of the '362 Patent are presently asserted.
4 Accordingly, there is no duty to mark pursuant to 35 U.S.C. § 287.

5
6 **COUNT V**
7 **(Infringement of the '826 Patent)**

8 329. Entropic incorporates by reference each allegation of the paragraphs
9 above as if fully set forth herein.

10 330. Entropic served infringement contentions in Case No. 01050, which
11 included a claim chart for the '826 Patent on September 15, 2023.

12 331. The '826 Patent duly issued on November 21, 2017, from an application
13 filed November 23, 2015, an application filed July 28, 2014, an application filed
14 September 10, 2012, and, *inter alia* a provisional application filed September 8, 2011.

15 332. Entropic owns all substantial rights, interest, and title in and to the '826
16 Patent, including the sole and exclusive right to prosecute this action and enforce the
17 '826 Patent against infringers and to collect damages for all relevant times.

18 333. The '826 Patent generally describes a system that receives a signal
19 having a plurality of channels, digitizes the received signal, and reports certain signal
20 characteristics to the source of the received signal. A true and accurate copy of the
21 '826 Patent is attached hereto as Exhibit 9.

22 334. The '826 Patent is directed to patent-eligible subject matter pursuant to
23 35 U.S.C. § 101.

24 335. The '826 Patent is valid and enforceable, and presumed as such,
25 pursuant to 35 U.S.C. § 282.

26 336. Comcast deploys one or more of the Accused Cable Modem Products
27 and Accused Set Top Products in connection with operating and providing the
28 Accused Services.

1 337. The Accused Cable Modem Products and Accused Set Top Products
2 deployed by Comcast to customer premises remain the property of Comcast while
3 deployed.

4 338. The Accused Cable Modem Products and Accused Set Top Products
5 operate while deployed in a manner controlled and intended by Comcast.

6 339. As set forth in the infringement contentions served on Comcast in Case
7 No. 01050 on September 15, 2023 (attached hereto as Exhibit 10),¹⁹ Comcast has
8 directly infringed and is infringing at least Claims 1-4, 6, 8, and 9 of the '826 Patent
9 by using, importing, selling, and/or offering for sale the Accused Cable Modem
10 Products, Accused Set Top Products and/or the Accused Services.

11 340. Each aspect of the functioning of the Accused Cable Modem Products
12 and Accused Set Top Products described in the claim chart operates while deployed
13 to customer premises in a manner controlled and intended by Comcast.

14 341. Comcast provides no software, support, or other facility to customers to
15 modify any aspect of the functioning described in the claim chart of the Accused
16 Cable Modem Products and Accused Set Top Products while deployed to customer
17 premises.

18 342. Comcast directly infringes at least Claims 1-4, 6, 8, and 9 of the '826
19 Patent by using, importing, selling, and/or offering for sale the Accused Cable
20 Modem Products and Accused Set Top Products (for example, the Technicolor
21 CGM4140 cable modem) and/or the Accused Services (for example, monitoring
22 signals by the Accused Cable Modem Products and Accused Set Top Products).

23 343. The use of the Accused Cable Modem Products and Accused Set Top
24 Products by Comcast to, for example, demonstrate products in brick-and-mortar
25 stores at 685 East Betteravia Rd., Santa Maria, California, 93454; and 1145 N. H
26

27 ¹⁹ The original claim chart for this patent was filed with this Court at Case No.
28 01050, DE 63.

1 Street, Suite B, Lompoc, California 93436, or to, for example, test those products,
2 constitute acts of direct infringement of at least Claims 1-4, 6, 8, and 9 of the '826
3 Patent.

4 344. Comcast has known of or has been willfully blind to the '826 Patent
5 since before, and no later than the date of, its acceptance of service of the Original
6 Complaint in Case No. 01050 on February 16, 2023.

7 345. Comcast has known of or has been willfully blind to the '826 Patent
8 since before, and no later than the date of, its acceptance of service of the First
9 Amended Complaint in Case No. 01050 on June 5, 2023.

10 346. Comcast has known of or has been willfully blind to the '826 Patent
11 since before, and no later than the date of, its acceptance of service of Entropic's
12 infringement contentions in Case No. 01050 on September 15, 2023.

13 347. Comcast has known of or has been willfully blind to the '826 Patent no
14 later than the day before signing the VSA with MaxLinear, Inc.

15 348. Comcast has known of or has been willfully blind to the '826 Patent
16 since before the August 9, 2022, communication from Entropic.

17 349. Comcast has been aware that it infringes the '826 Patent since well
18 before, and no later than the date of, its receipt of Entropic's August 9, 2022,
19 communication, attached as Exhibit 17. Since obtaining knowledge of the '826 Patent
20 and its infringing activities, Comcast has failed to cease its infringing activities.

21 350. Customers and subscribers of Comcast infringe at least Claims 1-4, 6,
22 8, and 9 of the '826 Patent by using the claimed system, at least during the use of the
23 Accused Cable Modem Products and Accused Set Top Products.

24 351. Comcast actively induces customers' direct infringement. For example,
25 Comcast actively induces infringement of at least Claims 1-4, 6, 8, and 9 of the '826
26 Patent by providing the Accused Cable Modem Products and Accused Set Top
27 Products to Comcast customers with specific instructions and/or assistance
28

1 (including installation) regarding the use of the Accused Cable Modem Products and
2 Accused Set Top Products to infringe the '826 Patent in accordance with the ordinary
3 course of operation through the provision of the Accused Services. Comcast provides
4 the signal monitoring claimed by the '826 Patent via the Accused Services, which
5 enable and induce its customers to directly infringe the '826 Patent. For at least the
6 above-listed reasons, Comcast aids, instructs, supports, and otherwise acts with the
7 intent to cause an end user to use the Accused Cable Modem Products and Accused
8 Set Top Products to infringe at least Claims 1-4, 6, 8, and 9 of the '826 Patent.

9 352. Comcast contributes to the customers' direct infringement. Comcast
10 provides apparatuses, namely the Accused Cable Modem Products and Accused Set
11 Top Products, that are used by customers to directly infringe at least Claims 1-4, 6,
12 8, and 9 of the '826 Patent.

13 353. The Accused Cable Modem Products and Accused Set Top Products
14 have no substantial non-infringing uses. When an end user uses the Accused Set Top
15 Products to receive the Accused Services, the end user directly infringes at least
16 Claims 1-4, 6, 8, and 9 of the '826 Patent. The Accused Cable Modem Products and
17 Accused Set Top Products are especially made or especially adapted for use in an
18 infringing manner.

19 354. Comcast's inducement of, and contribution to, the direct infringement
20 of at least Claims 1-4, 6, 8, and 9 of the '826 Patent is continuous and ongoing
21 through acts such as providing the Accused Cable Modem Products and Accused Set
22 Top Products to Comcast customers, which enables those customers to receive the
23 Accused Services; Comcast's provision of the Accused Services; and technical
24 assistance provided by Comcast for equipment it provides to its customers in support
25 of the provision of the Accused Services.

1 SNR profile, selecting a physical layer communication parameter to be used for
2 communicating with a service group based on a composite SNR-related metric, and
3 communicating with cable modems in the service group using the selected physical
4 layer communication parameter. A true and accurate copy of the '682 Patent is
5 attached hereto as Exhibit 11.

6 363. The '682 Patent is directed to patent-eligible subject matter pursuant to
7 35 U.S.C. § 101.

8 364. The '682 Patent is valid and enforceable, and presumed as such,
9 pursuant to 35 U.S.C. § 282.

10 365. Comcast deploys one or more of the Accused Cable Modem Products
11 in connection with operating and providing the Accused Services.

12 366. The Accused Cable Modem Products deployed by Comcast to customer
13 premises remain the property of Comcast while deployed.

14 367. The Accused Cable Modem Products operate while deployed in a
15 manner controlled and intended by Comcast.

16 368. As set forth in the infringement contentions served on Comcast in Case
17 No. 01050 on September 15, 2023 (attached hereto as Exhibit 12),²⁰ Comcast has
18 directly infringed and is infringing at least Claims 1-5 and 9 of the '682 Patent by
19 using, importing, selling, and/or offering for sale the Accused Services.

20 369. Each aspect of the functioning of the Accused Cable Modem Products
21 described in the claim chart operates while deployed to customer premises in a
22 manner controlled and intended by Comcast.

23 370. Comcast provides no software, support, or other facility to customers to
24 modify any aspect of the functioning described in the claim chart of the Accused
25 Cable Modem Products while deployed to customer premises.

27 ²⁰ The original claim chart for this patent was filed with this Court at Case No.
28 01050, DE 63.

1 371. Comcast directly infringes at least Claims 1-5 and 9 of the '682 Patent
2 by using, importing, selling, and/or offering for sale the Accused Services, which
3 utilize cable modem termination systems and/or converged cable access platforms
4 that communicate with the Accused Cable Modem Products (for example, the
5 Technicolor CGM4140 cable modem).

6 372. The use of the Accused Services by Comcast to, for example,
7 demonstrate products in brick-and-mortar stores at 685 East Betteravia Rd., Santa
8 Maria, California, 93454; and 1145 N. H Street, Suite B, Lompoc, California 93436,
9 or to, for example, test those products, constitute acts of direct infringement of at
10 least Claims 1-5 and 9 of the '682 Patent.

11 373. Comcast has known of or has been willfully blind to the '682 Patent
12 since before, and no later than the date of, its acceptance of service of the Original
13 Complaint in Case No. 01050 on February 16, 2023.

14 374. Comcast has known of or has been willfully blind to the '682 Patent
15 since before, and no later than the date of, its acceptance of service of the First
16 Amended Complaint in Case No. 01050 on June 5, 2023.

17 375. Comcast has known of or has been willfully blind to the '682 Patent
18 since before, and no later than the date of, its acceptance of service of Entropic's
19 infringement contentions in Case No. 01050 on September 15, 2023.

20 376. Comcast has known of or has been willfully blind to the '682 Patent no
21 later than the day before signing the VSA with MaxLinear, Inc.

22 377. Comcast has known of or has been willfully blind to the '682 Patent
23 since before the August 9, 2022, communication from Entropic.

24 378. Comcast has been aware that it infringes the '682 Patent since well
25 before, and no later than the date of, its receipt of Entropic's August 9, 2022,
26 communication, attached as Exhibit 17. Since obtaining knowledge of the '682 Patent
27 and its infringing activities, Comcast has failed to cease its infringing activities.
28

1 386. Entropic served infringement contentions in Case No. 01050, which
2 included a claim chart for the '866 Patent on September 15, 2023.

3 387. The '866 Patent duly issued on July 5, 2022 from an application filed
4 January 28, 2022, an application filed March 30, 2021, an application filed June 4,
5 2019, an application filed October 24, 2017, an application filed November 23, 2015,
6 an application filed February 10, 2015, an application filed August 8, 2013, an
7 application filed April 19, 2010, and, *inter alia* a provisional application filed April
8 17, 2009.

9 388. Entropic owns all substantial rights, interest, and title in and to the '866
10 Patent, including the sole and exclusive right to prosecute this action and enforce the
11 '866 Patent against infringers and to collect damages for all relevant times.

12 389. The '866 Patent generally describes a cable television device that
13 digitizes an entire input signal, concurrently selects a plurality of desired channels
14 from the digitized input signal without selecting any undesired channels, and
15 provides the plurality of desired channels. A true and accurate copy of the '866 Patent
16 is attached hereto as Exhibit 13.

17 390. The '866 Patent is directed to patent-eligible subject matter pursuant to
18 35 U.S.C. § 101.

19 391. The '866 Patent is valid and enforceable, and presumed as such,
20 pursuant to 35 U.S.C. § 282.

21 392. Comcast deploys one or more of the Accused Set Top Products in
22 connection with operating and providing the Accused Services.

23 393. The Accused Set Top Products deployed by Comcast to customer
24 premises remain the property of Comcast while deployed.

25 394. The Accused Set Top Products operate while deployed in a manner
26 controlled and intended by Comcast.
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1 395. As set forth in the infringement contentions served on Comcast in Case
2 No. 01050 on September 15, 2023 (attached hereto as Exhibit 14),²¹ Comcast has
3 directly infringed and is infringing at least Claims 27, 28, 33, 36, 37, 41, 42, 47, 50,
4 and 51 of the '866 Patent by using, importing, selling, and/or offering for sale the
5 Accused Set Top Products and/or the Accused Services.

6 396. Each aspect of the functioning of the Accused Set Top Products
7 described in the claim chart operates while deployed to customer premises in a
8 manner controlled and intended by Comcast.

9 397. Comcast provides no software, support, or other facility to customers to
10 modify any aspect of the functioning described in the claim chart of the Accused Set
11 Top Products while deployed to customer premises.

12 398. Comcast directly infringes at least Claims 27, 28, 33, 36, 37, 41, 42, 47,
13 50, and 51 of the '866 Patent by using, importing, selling, and/or offering for sale the
14 Accused Set Top Products (for example, the Arris AX013ANM STB) and/or the
15 Accused Services (for example, digitizing and selecting desired television channels
16 from an input signal).

17 399. The use of the Accused Set Top Products by Comcast to, for example,
18 demonstrate products in brick-and-mortar stores at 685 East Betteravia Rd., Santa
19 Maria, California, 93454; and 1145 N. H Street, Suite B, Lompoc, California 93436,
20 or to, for example, test those products, constitute acts of direct infringement of at
21 least Claims 27, 28, 33, 36, 37, 41, 42, 47, 50, and 51 of the '866 Patent.

22 400. Comcast has known of or has been willfully blind to the '866 Patent
23 since before, and no later than the date of, its acceptance of service of the Original
24 Complaint in Case No. 01050 on February 16, 2023.

27 ²¹ The original claim chart for this patent was filed with this Court at Case No.
28 01050, DE 63.

1 401. Comcast has known of or has been willfully blind to the '866 Patent
2 since before, and no later than the date of, its acceptance of service of the First
3 Amended Complaint in Case No. 01050 on June 5, 2023.

4 402. Comcast has known of or has been willfully blind to the '866 Patent
5 since before, and no later than the date of, its acceptance of service of Entropic's
6 infringement contentions in Case No. 01050 on September 15, 2023.

7 403. Comcast has known of or has been willfully blind to the '362 family, of
8 which the '866 Patent is a member, no later than the day before signing the VSA with
9 MaxLinear, Inc.

10 404. Comcast has known of or has been willfully blind to the '866 Patent
11 since before the August 9, 2022, communication from Entropic.

12 405. Comcast has been aware that it infringes the '866 Patent since well
13 before, and no later than the date of, its receipt of Entropic's August 9, 2022,
14 communication, attached as Exhibit 17. Since obtaining knowledge of the '866 Patent
15 and its infringing activities, Comcast has failed to cease its infringing activities.

16 406. Customers and subscribers of Comcast infringe at least Claims 27, 28,
17 33, 36, 37, 41, 42, 47, 50, and 51 of the '866 Patent by using the claimed system, at
18 least during the use of the Accused Set Top Products.

19 407. Comcast actively induces customers' direct infringement. For example,
20 Comcast actively induces infringement of at least Claims 27, 28, 33, 36, 37, 41, 42,
21 47, 50, and 51 of the '866 Patent by providing the Accused Set Top Products to
22 Comcast customers with specific instructions and/or assistance (including
23 installation) regarding the use of the Accused Set Top Products to infringe the '866
24 Patent in accordance with the ordinary course of operation through the provision of
25 the Accused Services. For at least the above-listed reasons, Comcast aids, instructs,
26 supports, and otherwise acts with the intent to cause an end user to use the Accused
27
28

1 Set Top Products to infringe at least Claims 27, 28, 33, 36, 37, 41, 42, 47, 50, and 51
2 of the '866 Patent.

3 408. Comcast contributes to the customers' direct infringement. Comcast
4 provides apparatuses, namely the Accused Set Top Products, that are used by
5 customers to directly infringe at least Claims 27, 28, 33, 36, 37, 41, 42, 47, 50, and
6 51 of the '866 Patent.

7 409. The Accused Set Top Products have no substantial non-infringing uses.
8 When an end user uses the Accused Set Top Products to receive the Accused
9 Services, the end user directly infringes at least Claims 27, 28, 33, 36, 37, 41, 42, 47,
10 50, and 51 of the '866 Patent. The Accused Set Top Products are especially made or
11 especially adapted for use in an infringing manner.

12 410. Comcast's inducement of, and contribution to, the direct infringement
13 of at least Claims 27, 28, 33, 36, 37, 41, 42, 47, 50, and 51 of the '866 Patent is
14 continuous and ongoing through acts such as providing the Accused Set Top Products
15 to Comcast customers, which enables those customers to receive the Accused
16 Services; Comcast's provision of the Accused Services; and technical assistance
17 provided by Comcast for equipment it provides to its customers in support of the
18 provision of the Accused Services.

19 411. Comcast's infringement of the '866 Patent is, has been, and continues
20 to be willful, intentional, deliberate, and/or in conscious disregard for Entropic's
21 rights under the patent.

22 412. Entropic has been damaged as a result of the infringing conduct alleged
23 above. Comcast is liable to Entropic in an amount that compensates Entropic for
24 Comcast's infringement, which by law cannot be less than a reasonable royalty,
25 together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

26 413. Entropic is aware of no obligation to mark any instrumentality with the
27 '866 Patent in accordance with 35 U.S.C. § 287.
28

COUNT VIII

(Infringement of the '206 Patent)

414. Entropic incorporates by reference each allegation of the paragraphs above as if fully set forth herein.

415. Entropic served infringement contentions in Case No. 01050, which included a claim chart for the '206 Patent on September 15, 2023.

416. The '206 Patent duly issued on July 26, 2022 from an application filed January 28, 2022, an application filed March 30, 2021, an application filed June 4, 2019, an application filed October 24, 2017, an application filed November 23, 2015, an application filed February 10, 2015, an application filed August 8, 2013, an application filed April 19, 2010, and, *inter alia* a provisional application filed April 17, 2009.

417. Entropic owns all substantial rights, interest, and title in and to the '206 Patent, including the sole and exclusive right to prosecute this action and enforce the '206 Patent against infringers and to collect damages for all relevant times.

418. The '206 Patent generally describes receiving an input signal from a cable network, digitizing the entire input signal, selecting a plurality of desired channels from the digitized input signal without selecting any undesired channels, and providing the plurality of desired channels. A true and accurate copy of the '206 Patent is attached hereto as Exhibit 15.

419. The '206 Patent is directed to patent-eligible subject matter pursuant to 35 U.S.C. § 101.

420. The '206 Patent is valid and enforceable, and presumed as such, pursuant to 35 U.S.C. § 282.

421. Comcast deploys one or more of the Accused Cable Modem Products and Accused Set Top Products in connection with operating and providing the Accused Services.

1 422. The Accused Cable Modem Products and Accused Set Top Products
2 deployed by Comcast to customer premises remain the property of Comcast while
3 deployed.

4 423. The Accused Cable Modem Products and Accused Set Top Products
5 operate while deployed in a manner controlled and intended by Comcast.

6 424. As set forth in the infringement contentions served on Comcast in Case
7 No. 01050 on September 15, 2023 (attached hereto as Exhibit 16),²² Comcast has
8 directly infringed and is infringing at least Claims 13, 14, 19, 21, 23, 25, 26, 31, 34,
9 35, 38, 39, 44, 47, and 48 of the '206 Patent by using, selling, and/or offering for sale
10 the Accused Services through the Accused Cable Modem Products and Accused Set
11 Top Products.

12 425. Each aspect of the functioning of the Accused Cable Modem Products
13 and Accused Set Top Products described in the claim chart operates while deployed
14 to customer premises in a manner controlled and intended by Comcast.

15 426. Comcast provides no software, support, or other facility to customers to
16 modify any aspect of the functioning described in the claim chart of the Accused
17 Cable Modem Products and Accused Set Top Products while deployed to customer
18 premises.

19 427. Comcast directly infringes at least Claims 13, 14, 19, 21, 23, 25, 26, 31,
20 34, 35, 38, 39, 44, 47, and 48 of the '206 Patent by using, importing, selling, and/or
21 offering for sale the Accused Cable Modem Products (for example, the Technicolor
22 CGM4140 cable modem), Accused Set Top Products (for example, the Arris
23 AX013ANM STB), and/or the Accused Services (for example, digitizing and
24 selecting desired channels from an input signal).

27 ²² The original claim chart for this patent was filed with this Court at Case No.
28 01050, DE 63.

1 428. The use of the Accused Services through the Accused Cable Modem
2 Products and Accused Set Top Products by Comcast to, for example, demonstrate
3 products in brick-and-mortar stores at 685 East Betteravia Rd., Santa Maria,
4 California, 93454; and 1145 N. H Street, Suite B, Lompoc, California 93436, or to,
5 for example, test those products, constitute acts of direct infringement of at least
6 Claims 13, 14, 19, 21, 23, 25, 26, 31, 34, 35, 38, 39, 44, 47, and 48 of the '206 Patent.

7 429. Customers and subscribers of Comcast infringe at least Claims 13, 14,
8 19, 21, 23, 25, 26, 31, 34, 35, 38, 39, 44, 47, and 48 of the '206 Patent by using the
9 claimed method, at least during receipt of the Accused Services utilizing, for
10 example, the Accused Cable Modem Products and Accused Set Top Products (for
11 example, the Technicolor CGM4140 cable modem).

12 430. The Accused Cable Modem Products and Accused Set Top Products
13 have no substantial non-infringing uses. When an end user uses the Accused Cable
14 Modem Products and Accused Set Top Products to receive the Accused Services, the
15 end user directly infringes at least Claims 13, 14, 19, 21, 23, 25, 26, 31, 34, 35, 38,
16 39, 44, 47, and 48 of the '206 Patent. The Accused Cable Modem Products and
17 Accused Set Top Products are especially made or especially adapted for use in an
18 infringing manner.

19 431. Entropic has been damaged as a result of the infringing conduct alleged
20 above. Comcast is liable to Entropic in an amount that compensates Entropic for
21 Comcast's infringement, which by law cannot be less than a reasonable royalty,
22 together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

23 432. No apparatus claims of the '206 Patent are presently asserted.
24 Accordingly, there is no duty to mark pursuant to 35 U.S.C. § 287.

25 433. Comcast has known of or has been willfully blind to the '206 Patent
26 since before, and no later than the date of, its acceptance of service of the Original
27 Complaint in Case No. 01050 on February 16, 2023.
28

1 434. Comcast has known of or has been willfully blind to the '206 Patent
2 since before, and no later than the date of, its acceptance of service of the First
3 Amended Complaint in Case No. 01050 on June 5, 2023.

4 435. Comcast has known of or has been willfully blind to the '206 Patent
5 since before, and no later than the date of, its acceptance of service of Entropic's
6 infringement contentions in Case No. 01050 on September 15, 2023.

7 436. Comcast has known of or has been willfully blind to the '362 family, of
8 which the '206 Patent is a member, no later than the day before signing the VSA with
9 MaxLinear, Inc.

10 437. Since obtaining knowledge of the '362 family, of which the '206 Patent
11 is a member, and its infringing activities, Comcast has failed to cease its infringing
12 activities.

13 438. Comcast's infringement of the '206 Patent is, has been, and continues
14 to be willful, intentional, deliberate, and/or in conscious disregard for Entropic's
15 rights under the patent.

16
17 **COUNT IX**

18 **(Infringement of the '275 Patent)**

19 439. Entropic incorporates by reference each allegation of the paragraphs
20 above as if fully set forth herein.

21 440. Entropic served an infringement contention claim chart for the '275
22 Patent in Case No. 01050 on November 3, 2023.

23 441. The '275 Patent duly issued on October 10, 2023, from an application
24 filed September 30, 2022, an application filed July 12, 2022, an application filed
25 January 28, 2022, an application filed March 30, 2021, an application filed June 4,
26 2019, an application filed October 24, 2017, an application filed November 23, 2015,
27 an application filed February 10, 2015, an application filed August 8, 2013, an
28

1 application filed April 19, 2010, and, *inter alia* a provisional application filed April
2 17, 2009.

3 442. Entropic owns all substantial rights, interest, and title in and to the '275
4 Patent, including the sole and exclusive right to prosecute this action and enforce the
5 '275 Patent against infringers and to collect damages for all relevant times.

6 443. The '275 Patent generally describes a wideband receiver system that
7 digitizes an input signal, selects desired channels from the digitized signal, and
8 outputs the selected desired channels for demodulation. A true and accurate copy of
9 the '275 Patent is attached hereto as Exhibit 18.

10 444. The '275 Patent is directed to patent-eligible subject matter pursuant to
11 35 U.S.C. § 101.

12 445. The '275 Patent is valid and enforceable, and presumed as such,
13 pursuant to 35 U.S.C. § 282.

14 446. Comcast deploys one or more of the Accused Set Top Products in
15 connection with operating and providing the Accused Services.

16 447. The Accused Set Top Products deployed by Comcast to customer
17 premises remain the property of Comcast while deployed.

18 448. The Accused Set Top Products operate while deployed in a manner
19 controlled and intended by Comcast.

20 449. As set forth in the infringement contentions served on Comcast in Case
21 No. 01050 on November 3, 2023 (attached hereto as Exhibit 19), Comcast has
22 directly infringed and is infringing at least Claims 1, 2, 5, 7, 8, 10-12, 15, 17, 18, and
23 20 of the '275 Patent by using, selling, and/or offering for sale the Accused Services
24 through the Accused Set Top Products.

25 450. Each aspect of the functioning of the Accused Set Top Products
26 described in the claim chart operates while deployed to customer premises in a
27 manner controlled and intended by Comcast.
28

1 451. Comcast provides no software, support, or other facility to customers to
2 modify any aspect of the functioning described in the claim chart of the Accused Set
3 Top Products while deployed to customer premises.

4 452. Comcast directly infringes at least Claims 1, 2, 5, 7, 8, 10-12, 15, 17,
5 18, and 20 of the '275 Patent by using, importing, selling, and/or offering for sale the
6 Accused Set Top Products (for example, the Arris AX013ANM STB) and/or the
7 Accused Services (for example, digitizing and selecting desired channels from an
8 input signal).

9 453. The use of the Accused Services through the Accused Set Top Products
10 by Comcast to, for example, demonstrate products in brick-and-mortar stores at 685
11 East Betteravia Rd., Santa Maria, California, 93454; and 1145 N. H Street, Suite B,
12 Lompoc, California 93436, or to, for example, test those products, constitute acts of
13 direct infringement of at least Claims 1, 2, 5, 7, 8, 10-12, 15, 17, 18, and 20 of the
14 '275 Patent.

15 454. Customers and subscribers of Comcast infringe at least Claims 1, 2, 5,
16 7, 8, 10-12, 15, 17, 18, and 20 of the '275 Patent by using the claimed method, at
17 least during receipt of the Accused Services utilizing, for example, the Accused Set
18 Top Products.

19 455. The Accused Set Top Products have no substantial noninfringing uses.
20 When an end user uses the Accused Set Top Products to receive the Accused
21 Services, the end user directly infringes at least Claims 1, 2, 5, 7, 8, 10-12, 15, 17,
22 18, and 20 of the '275 Patent. The Accused Set Top Products are especially made or
23 especially adapted for use in an infringing manner.

24 456. Entropic has been damaged as a result of the infringing conduct alleged
25 above. Comcast is liable to Entropic in an amount that compensates Entropic for
26 Comcast's infringement, which by law cannot be less than a reasonable royalty,
27 together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
28

1 457. Comcast has known of or has been willfully blind to the '275 Patent
2 since before, and no later than the date of, its acceptance of service of Entropic's
3 infringement contentions in Case No. 01050, on November 3, 2023.

4 458. Comcast has known of or has been willfully blind to the '362 family, of
5 which the '275 Patent is a member, no later than the day before signing the VSA with
6 MaxLinear, Inc.

7 459. Since obtaining knowledge of the '362 family, of which the '275 Patent
8 is a member, and its infringing activities, Comcast has failed to cease its infringing
9 activities.

10 460. Comcast has known of or has been willfully blind to the '275 Patent
11 since at least November 3, 2023, when Entropic served Comcast its infringement
12 contention claim charts in Case No. 01050.

13 461. Comcast has been aware that it infringes the '275 Patent since well
14 before, and no later than the date of, its receipt of Entropic's infringement contention
15 claim charts served in Case No. 01050 on November 3, 2023. Since obtaining
16 knowledge of the '275 Patent and its infringing activities, Comcast has failed to cease
17 its infringing activities.

18 462. Comcast's infringement of the '275 Patent is, has been, and continues
19 to be willful, intentional, deliberate, and/or in conscious disregard for Entropic's
20 rights under the patent.

21 463. Entropic is aware of no obligation to mark any instrumentality with the
22 '275 Patent in accordance with 35 U.S.C. § 287.

23 **COUNT X**

24 **(Infringement of the '438 Patent)**

25 464. Entropic incorporates by reference each allegation of Paragraphs 1
26 through 349.
27
28

1 465. Entropic served an infringement contention claim chart for the '438
2 Patent in Case No, 01050 on November 3, 2023.

3 466. The '438 Patent duly issued on January 9, 2018, from an application
4 filed February 16, 2017, an application filed August 4, 2016, an application filed July
5 23, 2013, and, *inter alia* a provisional application filed July 23, 2012.

6 467. Entropic owns all substantial rights, interest, and title in and to the '438
7 Patent, including the sole and exclusive right to prosecute this action and enforce the
8 '438 Patent against infringers and to collect damages for all relevant times.

9 468. The '438 Patent generally describes a mechanism for determining
10 communication parameters for communications between a cable modem termination
11 system and cable modems. A true and accurate copy of the '438 Patent is attached
12 hereto as Exhibit 20.

13 469. The '438 Patent is directed to patent-eligible subject matter pursuant to
14 35 U.S.C. § 101.

15 470. The '438 Patent is valid and enforceable, and presumed as such,
16 pursuant to 35 U.S.C. § 282.

17 471. Comcast deploys one or more of the Accused Cable Modem Products
18 and Accused Set Top Products in connection with operating and providing the
19 Accused Services.

20 472. The Accused Cable Modem Products and Accused Set Top Products
21 deployed by Comcast to customer premises remain the property of Comcast while
22 deployed.

23 473. The Accused Cable Modem Products operate while deployed in a
24 manner controlled and intended by Comcast.

25 474. As set forth in the infringement contentions served on Comcast in Case
26 No. 01050 on November 3, 2023 (attached hereto as Exhibit 21), Comcast has
27
28

1 directly infringed and is infringing at least Claims 1-5 and 9 of the '438 Patent, by
2 using, importing, selling, and/or offering for sale the Accused Services.

3 475. Each aspect of the functioning of the Accused Cable Modem Products
4 and Accused Set Top Products described in the claim chart operates while deployed
5 to customer premises in a manner controlled and intended by Comcast.

6 476. Comcast provides no software, support, or other facility to customers to
7 modify any aspect of the functioning described in the claim chart of the Accused
8 Cable Modem Products and Accused Set Top Products while deployed to customer
9 premises.

10 477. Comcast directly infringes at least Claims 1-5 and 9 of the '438 Patent
11 by using, importing, selling, and/or offering for sale the Accused Services, which
12 utilize cable modem termination systems and/or converged cable access platforms
13 that communicate with the Accused Cable Modem Products and Accused Set Top
14 Products (for example, the Technicolor CGM4140 cable modem).

15 478. The use of the Accused Services by Comcast to, for example,
16 demonstrate products in brick-and-mortar stores at 685 East Betteravia Rd., Santa
17 Maria, California, 93454; and 1145 N. H Street, Suite B, Lompoc, California 93436,
18 or to, for example, test those products, constitute acts of direct infringement of at
19 least Claims 1-5 and 9 of the '438 Patent.

20 479. Comcast has known of or has been willfully blind to the '438 Patent
21 since before, and no later than the date of, its acceptance of service of Entropic's
22 infringement contentions in Case No. 01050 on November 3, 2023.

23 480. Comcast has known of or has been willfully blind to the '682 family, of
24 which the '438 Patent is a member, no later than the day before signing the VSA with
25 MaxLinear, Inc.
26
27
28

1 481. Since obtaining knowledge of the '682 family, of which the '438 Patent
2 is a member, and its infringing activities, Comcast has failed to cease its infringing
3 activities.

4 482. Comcast has been aware that it infringes the '438 Patent since well
5 before, and no later than the date of, its receipt of Entropic's infringement contention
6 claim charts served in Case No, 01050 on November 3, 2023. Since obtaining
7 knowledge of the '438 Patent and its infringing activities, Comcast has failed to cease
8 its infringing activities.

9 483. Comcast's infringement of the '438 Patent is, has been, and continues
10 to be willful, intentional, deliberate, and/or in conscious disregard for Entropic's
11 rights under the patent.

12 484. Entropic has been damaged as a result of the infringing conduct alleged
13 above. Comcast is liable to Entropic in an amount that compensates Entropic for
14 Comcast's infringement, which by law cannot be less than a reasonable royalty,
15 together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

16 485. No apparatus claims of the '438 Patent are presently asserted.
17 Accordingly, there is no duty to mark pursuant to 35 U.S.C. § 287.

18
19 **PRAYER FOR RELIEF**

20 WHEREFORE, Entropic requests that:

21 A. The Court find that Comcast has directly infringed the Patents-in-Suit
22 and hold Comcast liable for such infringement;

23 B. The Court find that Comcast has indirectly infringed the Patents-in-Suit
24 by inducing its customers to directly infringe the Patents-in-Suit and hold Comcast
25 liable for such infringement;

26 C. The Court find that Comcast has indirectly infringed the Patents-in-Suit
27 by contributing to its customers' direct infringement of the Patents-in-Suit and hold
28 Comcast liable for such infringement;

1 D. The Court award damages pursuant to 35 U.S.C. § 284 adequate to
2 compensate Entropic for Comcast's past infringement of the Patents-in-Suit,
3 including both pre- and post-judgment interest and costs as fixed by the Court;

4 E. The Court find that Comcast willfully infringed the Patents-in-Suit, and
5 increase the damages to be awarded to Entropic by three times the amount found by
6 the jury or assessed by the Court;

7 F. The Court declare that this is an exceptional case entitling Entropic to
8 its reasonable attorneys' fees under 35 U.S.C. § 285; and

9 G. The Court award such other relief as the Court may deem just and
10 proper.

11 **JURY TRIAL DEMANDED**

12 Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Entropic
13 hereby requests a trial by jury on all issues raised by this Complaint.
14

15 Dated: August 23, 2025

K&L GATES LLP

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