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Attorneys for Plaintiff Competitive Access Systems, Inc.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

COMPETITIVE ACCESS SYSTEMS, INC.)

Plaintiff,)

v.)

APPLE INC.,)

Defendant.)

Case No:

**COMPLAINT FOR PATENT
INFRINGEMENT**

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff Competitive Access Systems, Inc. ("CAS" or "Plaintiff") makes this Complaint, including a demand for a jury trial, against Defendant Apple Inc. ("Apple" or "Defendant") and alleges as follows:

NATURE OF THE ACTION

1. This is an action for infringement of U.S. Patent Nos. 7,606,156; 8,228,801; 8,861,349; 9,350,649; 10,868,908; 11,418,641; and 11,582,343. This action seeks past money damages (for all patents) and ongoing money damages (for one patent) for the Defendant's acts of making, using, selling, offering for sale, and/or importing its accused products that infringe CAS's rights in seven issued U.S. Patents. Such accused products include electronic products, including but not limited to Apple's iPhone, that implement multipath TCP ("MPTCP") in conjunction with Apple's Wi-Fi Assist feature.

THE PARTIES

2. Plaintiff Competitive Access Systems, Inc., is incorporated under the laws of the State of Texas, and its principal place of business is located in Plano, Texas.

3. Upon information and belief, Defendant Apple Inc. is a corporation organized and existing under the laws of the State of California, and its principal place of business is located at One Apple Park Way, Cupertino, CA 95014.

JURISDICTION AND VENUE

4. This action arises under the United States patent laws, 35 U.S.C. § 101, *et seq.*, including 35 U.S.C. § 271. This Court has subject matter jurisdiction under 28 U.S.C. § 1331 and § 1338(a).

5. This Court has personal jurisdiction over Apple because, upon information and belief, Apple is incorporated under the laws of the State of California and therefore resides in California. On information and belief, Defendant also regularly conducts business in this judicial district related to the products at issue in this action. On information and belief, Defendant uses, offers for sale, and/or sells its products at issue in this action within this District or otherwise places

1 such products within the stream of commerce with the expectation that they would be used in this
2 District.

3 6. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b) because
4 Apple is, upon information and belief, incorporated under the laws of the State of California and
5 is legally deemed to reside in California.

6 **DIVISIONAL ASSIGNMENT**

7 7. This is an action for patent infringement and is subject to district-wide assignment
8 pursuant to the Court's Assignment Plan.

9 **INTRODUCTION**

10 ***CAS and Eric Delangis***

11 8. CAS was founded by Eric Delangis as a technology design and development
12 company.

13 9. Mr. Delangis has extensive experience designing communications systems for
14 satellites and terrestrial applications. While living in rural Colorado, Mr. Delangis was unable to
15 obtain high speed internet. Rather than settle for slow, dial-up internet, Mr. Delangis attempted to
16 find a commercial solution for pooling multiple internet connections. When he was unable to locate
17 any solutions to his problem, Mr. Delangis invented innovative router technology to route data
18 over several internet connections, including DSL, ISDN, dial-up, and wireless connections, and
19 combine the received data for the intended receiving device.

20 10. In particular, Mr. Delangis developed a variety of systems and protocols for
21 transmitting and receiving data in a faster and more efficient manner by transmitting data over
22 multiple communication channels to improve the effective bandwidth between the sender and
23 recipient of the data. The usage of multiple communication channels further provides enhanced
24 reliability as data can be transmitted even when some of the communication channels are suffering
25 from reduced performance or are unavailable. This improves the functionality of the computer
26 networks themselves, particularly as compared to the solutions available at the time Mr. Delangis
27 invented his router technology.
28

11. Mr. Delangis' solution is necessarily rooted in computer technology to overcome a problem specifically arising in the realm of computer networks.

Apple and Apple's Wi-Fi Assist Products

12. Apple designs, markets and sells, among other things, wireless portable electronic devices, such as the iPhone smartphone, iPad tablet and iPod mp3 player. Apple's iPhone, iPad, and iPod all run proprietary Apple operating system software – iOS for the iPhone and iPod, iPadOS for the iPad (beginning in September 2019; previously, the iPad ran iOS).

13. With the release of iOS 9 on September 16, 2015, Apple added Wi-Fi Assist, which enables an Apple device to switch from Wi-Fi to a cellular connection when Wi-Fi is unstable. Apple's iPhone, iPad, and iPod models that run iOS 9 or later implement Wi-Fi Assist. See Exhibit Q at p.1.

14. As explained more fully below, CAS asserts that each Apple product implementing Apple's Wi-Fi Assist feature infringes the Asserted Patents. To recover appropriate remedies for past and ongoing infringement, CAS brings this action for patent infringement.

THE CAS ASSERTED PATENTS

15. The claims in this Complaint are for infringement of U.S. Patent Nos. 7,606,156 8,228,801; 8,861,349; 9,350,649; 10,868,908; 11,418,641; and 11,582,343 (collectively the "Asserted Patents"). CAS does not waive, and expressly reserves, all rights and claims for relief against Apple and others with regard to its patent rights beyond those set forth in this Complaint.

The '156 Patent

16. U.S. Patent No. 7,606,156 (the "'156 Patent'") is entitled "Residential communications gateway (RCG) for broadband communications over a plurality of standard POTS lines, with dynamic allocation of said bandwidth, that requires no additional equipment or modifications to the associated class 5 offices or the PSTN at large." The '156 Patent was duly and legally issued on October 20, 2009, by the United States Patent and Trademark Office. A copy of the '156 Patent is attached to this Complaint as Exhibit A and incorporated herein by reference.

17. CAS is the owner and assignee of the '156 Patent and possesses all rights of recovery under the '156 Patent.

18. The '156 Patent has not expired and is in full force and effect.

19. The '156 Patent Claims are valid and enforceable.

20. The '156 Patent generally pertains to a method for aggregating, sharing and dynamically routing and allocating bandwidth from a plurality of wired and wireless networks.

The '801 Patent

21. U.S. Patent No. 8,228,801 (the "'801 Patent") is entitled "Broadband Communications Device." The '801 Patent was duly and legally issued on July 24, 2012, by the United States Patent and Trademark Office. A copy of the '801 Patent is attached to this Complaint as Exhibit B and incorporated herein by reference.

22. CAS is the owner and assignee of the '801 Patent and possesses all rights of recovery under the '801 Patent.

23. The '801 Patent expired on January 22, 2025. This Complaint seeks damages related to infringement of the '801 Patent prior to its expiration.

24. The '801 Patent claims are valid and enforceable.

The '349 Patent

25. U.S. Patent No. 8,861,349 (the "'349 Patent") is entitled "Broadband Communications Device." The '349 Patent was duly and legally issued on October 14, 2014, by the United States Patent and Trademark Office. A copy of the '349 Patent is attached to this Complaint as Exhibit C and incorporated herein by reference.

26. CAS is the owner and assignee of the '349 Patent and possesses all rights of recovery under the '349 Patent.

27. The '349 Patent expired on October 14, 2023. This Complaint seeks damages for infringement of the '349 Patent prior to its expiration.

28. The '349 Patent claims are valid and enforceable.

The '649 Patent

29. U.S. Patent No. 9,350,649 (the "'649 Patent") is entitled "Multipath Communication Devices and Methods." The '649 Patent was duly and legally issued on May 24,

2016, by the United States Patent and Trademark Office. A copy of the '649 Patent is attached to this Complaint as Exhibit D and incorporated herein by reference.

30. CAS is the owner and assignee of the '649 Patent and possesses all rights of recovery under the '649 Patent.

31. The '649 Patent expired on October 14, 2023. This Complaint seeks damages related to infringement of the '649 Patent prior to its expiration.

32. The '649 Patent claims are valid and enforceable.

The '908 Patent

33. U.S. Patent No. 10,868,908 (the "'908 Patent'") is entitled "Devices and methods for multipath communications." The '908 Patent was duly and legally issued on December 15, 2020, by the United States Patent and Trademark Office. A copy of the '908 Patent is attached to this Complaint as Exhibit E and incorporated herein by reference.

34. CAS is the owner and assignee of the '908 Patent and possesses all rights of recovery under the '908 Patent.

35. The '908 Patent expired on October 14, 2023. This Complaint seeks damages related to infringement of the '908 Patent prior to its expiration.

36. The asserted '908 Patent claims are valid and enforceable. While certain claims were rejected in a reexamination proceeding (and that judgment is currently being disputed), the asserted claims of the '908 Patent have not been challenged.

The '641 Patent

37. U.S. Patent No. 11,418,641 (the "'641 Patent'") is entitled "Devices and Methods for Multipath Communications." The '641 Patent was duly and legally issued on August 16, 2022, by the United States Patent and Trademark Office. A copy of the '641 Patent is attached to this Complaint as Exhibit F and incorporated herein by reference.

38. CAS is the owner and assignee of the '641 Patent and possesses all rights of recovery under the '641 Patent.

39. The '641 Patent expired on October 14, 2023. This Complaint seeks damages related to infringement of the '641 Patent prior to its expiration.

1 40. The '641 Patent claims are valid and enforceable.

2 **The '343 Patent**

3 41. U.S. Patent No. 11,582,343 (the "'343 Patent") is entitled "Devices and Methods
4 for Multipath Communications." The '343 Patent was duly and legally issued on February 14,
5 2023, by the United States Patent and Trademark Office. A copy of the '343 Patent is attached to
6 this Complaint as Exhibit G and incorporated herein by reference.

7 42. CAS is the owner and assignee of the '343 Patent and possesses all rights of
8 recovery under the '343 Patent.

9 43. The '343 Patent expired on October 14, 2023. CAS seeks damages for infringement
10 of the '343 Patent occurring prior to its expiration.

11 44. The '343 Patent claims are valid and enforceable.

12 **DEFENDANT'S ACCUSED PRODUCTS**

13 45. On September 9, 2015, Apple released iOS 9. See Exhibit L.

14 46. iOS 9 was the first Apple software deployed by Apple's iPhone, iPad and iPod to
15 use Wi-Fi Assist to automatically use cellular data when Wi-Fi connectivity is poor. See Exhibit
16 M at p. 30; Exhibit Q.

17 47. The Wi-Fi Assist feature, for example, activates when an Apple iPhone, iPad, or
18 iPod has a poor Wi-Fi connection and a webpage does not load, and causes the device to switch to
19 cellular so that the webpage continues to load. Exhibit Q at p. 1.

20 48. As such, Wi-Fi Assist makes decisions based on signal quality to maximize
21 connection speeds. *Id.*

22 49. On information and belief, Wi-Fi Assist implements Multipath TCP ("MPTCP"), a
23 transmission control protocol designed to maximize throughput through redundancy. See Exhibit
24 M at p. 30

25 50. On further information and belief, Apple's Wi-Fi Assist products comply with RFC
26 6824, which Apple cites in its product materials. See Exhibit N at p. 1 (Apple explaining that
27 Multipath TCP is defined by the Internet Engineering Task Force (IETF) in RFC 6824).
28

1 51. Specifically, users of iPhone, iPod, or iPad can use “MPTCP with an active cellular
2 data connection to make two connections: [a] primary TCP connection over Wi-Fi [and a] backup
3 connection over cellular data,” where “[i]f Wi-Fi becomes unavailable or unresponsive, iOS uses
4 the cellular data connection.” Exhibit R.

5 52. Apple further explains that typically “a URL session uses a single radio for a
6 network call, preferring Wi-Fi over cellular,” but that “with MultiPath TCP enabled, the URL
7 session initiates the request on both radios and selects the more responsive of the two with a
8 preference for Wi-Fi.” Exhibit O at p. 1.

9 53. That is, Apple’s implementation of MPTCP allows “multiple interfaces to transmit
10 a single data stream,” which “allows a seamless handover from Wi-Fi to cellular, aimed at making
11 both interfaces more efficient and improving user experience.” Exhibit N at p. 1.

12 54. Apples discloses that “Multipath TCP improves the performance of your app when
13 a user is in a location with limited Wi-Fi and while their device is transitioning to and from cellular
14 data usage.” Exhibit O at p. 1.

15 55. MPTCP also allows users of the Accused Products to “combine link capacities”
16 simultaneously in what is termed “aggregation mode.” Exhibit T at p. 56. Apple instructs that
17 enabling aggregation mode allows users to further “maximize bandwidth across multiple
18 interfaces.” Exhibit P at p. 1.

19 56. Apple further discloses that customers “can use Wi-Fi Assist with any iOS device
20 with iOS 9 or later, except for these models: iPhone 4s, iPad 2 Wi-Fi+Cellular, iPad (3rd
21 generation) Wi-Fi+Cellular, and iPad mini (1st generation) Wi-Fi+Cellular.” Exhibit Q at p. 1.

22 57. Apple infringed CAS’s patents rights by making, using, selling, offering for sale,
23 and/or importing the Wi-Fi Assist Products. The known Apple “Accused Products” include, but
24 are not limited to, the following:

25 a. iPhone

- 26 i. iPhone 5
27 ii. iPhone 5C
28 iii. iPhone 5S

- iv. iPhone 6
- v. iPhone 6 Plus
- vi. iPhone 6S
- vii. iPhone 6S Plus
- viii. Phone SE (1st gen)
- ix. iPhone 7
- x. iPhone 7 Plus
- xi. iPhone 8
- xii. iPhone 8 Plus
- xiii. iPhone X
- xiv. iPhone XS
- xv. iPhone XS Max
- xvi. iPhone XR
- xvii. iPhone 11
- xviii. iPhone 11 Pro
- xix. iPhone 11 Pro Max
- xx. iPhone SE (2nd gen)
- xxi. iPhone 12 mini
- xxii. iPhone 12
- xxiii. iPhone 12 Pro
- xxiv. iPhone 12 Pro Max
- xxv. iPhone 13 mini
- xxvi. iPhone 13
- xxvii. iPhone 13 Pro
- xxviii. iPhone 13 Pro Max
- xxix. iPhone SE (3rd gen)
- xxx. iPhone 14
- xxxi. iPhone 14 Plus

- xxxii. iPhone 14 Pro
- xxxiii. iPhone 14 Pro Max
- xxxiv. iPhone 15
- xxxv. iPhone 15 Plus
- xxxvi. iPhone 15 Pro
- xxxvii. iPhone 15 Pro Max

b. iPad

- i. iPad (3rd generation)
- ii. iPad (4th generation)
- iii. iPad Mini 2
- iv. iPad Air (1st generation)
- v. iPad Air 2
- vi. iPad Mini 3
- vii. iPad Mini 4
- viii. iPad Pro 12.9-inch (1st generation)
- ix. iPad Pro 9.7-inch (1st generation)
- x. iPad (5th generation)
- xi. iPad Pro 10.5-inch (2nd generation)
- xii. iPad Pro 12.9-inch (2nd generation)
- xiii. iPad (6th generation)
- xiv. iPad Pro 11-inch (3rd generation)
- xv. iPad Pro 12.9-inch (3rd generation)
- xvi. iPad Air (3rd generation)
- xvii. iPad Mini (5th generation)
- xviii. iPad (7th generation)
- xix. iPad Pro 11-inch (4th generation)
- xx. iPad Pro 12.9-inch (4th generation)
- xxi. iPad Air (4th generation)

- xxii. iPad (8th generation)
- xxiii. iPad Pro (5th generation)
- xxiv. iPad Mini (6th generation)
- xxv. iPad (9th generation)
- xxvi. iPad Air (5th generation)
- xxvii. iPad Pro (6th generation)
- xxviii. iPad (10th generation)
- xxix. iPad Pro (7th generation)
- xxx. iPad Air (6th generation)
- xxxi. iPad Mini (7th generation)
- c. iPod
 - i. iPod touch (5th generation)
 - ii. iPod touch (6th generation)
 - iii. iPod touch (7th generation)

DEFENDANT'S KNOWLEDGE OF CAS' PATENT RIGHTS

58. Beginning in 2014, and as recently as 2023, Clay McGurk, Esq. ("McGurk"), as Licensing Agent for Eric Delangis, founder of CAS and inventor with respect to the Asserted Patents, sent letters to Apple to provide notice of the Asserted Patents.

59. On June 12, 2014, McGurk sent letters to Apple's Chief IP Counsel, Mr. B. J. Watrous, and Mr. Kevin Lynch, Apple's Vice President of Technology, proposing a license of the '156 Patent and '801 Patent for Apple's products which implement Multipath TCP ("MPTCP"). See Exhibit H.

60. Apple had knowledge of the '801 Patent and '156 Patent on a date no later than June 27, 2014, when it issued a response to McGurk's June 12, 2014 letter.

61. On October 14, 2014, McGurk sent another letter to Apple, announcing the issuance of the '349 Patent. McGurk's letter offered to license the '156 Patent, '801 Patent, and '349 to Apple. See Exhibit I.

62. Apple had knowledge of the ‘349 Patent on a date no later than December 18, 2014, when it issued a response to the October 14, 2014 correspondence.

63. On May 24, 2016, McGurk sent another correspondence to Apple, announcing the issuance of the ‘649 Patent. In addition to again offering to begin good faith licensing negotiations, McGurk in this letter also proposed that Apple purchase the patent portfolio. See Exhibit J.

64. Apple had knowledge of the ‘649 Patent on a date no later than July 11, 2016, when it responded to the May 24, 2016 letter.

65. On October 2, 2023, McGurk mailed another letter to Apple. In this letter, McGurk announced the issuance of three more of the now Asserted Patents, the ‘908 Patent, ‘343 Patent, and the ‘641 Patent. The letter formally stated that “CAS is providing notice about its patent to your company with the intention of licensing its portfolio to your company.” Exhibit K.

66. Apple had knowledge of the ‘908 Patent, the ‘343 Patent, and the ‘641 Patent on a date no later than October 18, 2023, when it responded to the October 2, 2023, letter.

67. Upon receiving each letter concerning the Asserted Patent, Apple declined to engage in good faith licensing negotiations, despite persistent offers by CAS’s representative to do so. After receiving each such notice, Defendant continued to make, use, offer for sale, and/or sell infringing products and/or continued to import into the United States its infringing products.

68. On information and belief, Apple has not made any attempt to redesign, modify, or withdraw any of its Infringing Products in response to CAS’s infringement notices.

69. Defendant knows and at all relevant times has known of its infringement of the Asserted Patents, or at the very least has been willfully blind to its infringement of the Asserted Patents.

70. Upon information and belief, such infringement has been willful, and upon further belief, Defendant lacks any reasonable invalidity or non-infringement defense making this case exceptional and entitling CAS to increased damages and reasonable attorneys’ fees pursuant to 35 U.S.C. §§ 284 and 285.

CLAIMS FOR RELIEF

71. CAS's averments of infringement against Apple that follow in Counts One – Seven are exemplary of, and without prejudice to, CAS's ultimate infringement contentions. In providing these averments, CAS does not convey or imply any particular claim constructions or purport to describe the precise scope of the claims. CAS's claim constructions, as necessary, regarding any particularized meaning of the claim terms for the Asserted Patents' claims will be provided in accordance with the Court's scheduling order and any applicable local rules or standards.

COUNT ONE

(INFRINGEMENT OF U.S. PATENT NO. 7,606,156)

72. CAS repeats, re-alleges, and incorporates by reference the averments of paragraphs 1-71 of this Complaint as though fully set forth herein.

73. Apple's Accused Products infringe at least claim 1 of the '156 Patent.

74. By way of further illustrative infringement, claim 1 of the '156 Patent reads as follows:

1. A method for aggregating, sharing and dynamically routing and allocating bandwidth from a plurality of wired and wireless networks that are geographically disbursed over a wide area, and providing some or all of the aggregated bandwidth to any user on an on-demand basis, the method comprising the steps of:

developing and updating a network table that comprises a list of nearby RCGs, their bandwidth capabilities over local, remote and wireless connections, and their location with respect to a requesting RCG;

determining an optimum amount of bandwidth needed for an immediate data transfer needs of the requesting RCG;

determining which of the nearby RCGs should be contacted for access to unused bandwidth to support a transfer of the requesting RCG, based upon their unused local bandwidth capacity, and a distance and a number of hops between the RCGs and the requesting RCG;

sending a request to the supporting RCGs asking for use of a portion of the unused bandwidth;

receiving responses from the supporting RCGs with information about how much bandwidth each selected RCG can share;

selecting which of the supporting RCGs to use for optimal use of needed bandwidth;

contacting the selected RCGs with control information for sending data to the requesting RCG;

1 sending packets of the data from the selected RCGs to the requesting RCG;
2 reassembling the packets of the data at the requesting RCG; and
3 relinquishing the bandwidth of each of the selected RCGs.

4 75. Any Apple device with an iOS having the Wi-Fi Assist feature and using
5 aggregation mode performs a "method for aggregating, sharing and dynamically routing and
6 allocating bandwidth from a plurality of wired and wireless networks that are geographically
7 disbursed over a wide area, and providing some or all of the aggregated bandwidth to any user on
8 an on-demand basis."

9 76. Any Apple device with an iOS having the Wi-Fi Assist feature and using
10 aggregation mode performs the step of "developing and updating a network table that comprises a
11 list of nearby RCGs, their bandwidth capabilities over local, remote and wireless connections, and
12 their location with respect to a requesting RCG."

13 77. Any Apple device with an iOS having the Wi-Fi Assist feature and using
14 aggregation mode performs the step of "determining an optimum amount of bandwidth needed for
15 an immediate data transfer needs of the requesting RCG."

16 78. Any Apple device with an iOS having the Wi-Fi Assist feature and using
17 aggregation mode performs the step of "determining which of the nearby RCGs should be
18 contacted for access to unused bandwidth to support a transfer of the requesting RCG, based upon
19 their unused local bandwidth capacity, and a distance and a number of hops between the RCGs
20 and the requesting RCG."

21 79. Any Apple device with an iOS having the Wi-Fi Assist feature and using
22 aggregation mode performs the step of "sending a request to the supporting RCGs asking for use
23 of a portion of the unused bandwidth."

24 80. Any Apple device with an iOS having the Wi-Fi Assist feature and using
25 aggregation mode performs the step of "receiving responses from the supporting RCGs with
26 information about how much bandwidth each selected RCG can share."

27 81. Any Apple device with an iOS having the Wi-Fi Assist feature and using
28 aggregation mode performs the step of "selecting which of the supporting RCGs to use for optimal
use of needed bandwidth."

1 82. Any Apple device with an iOS having the Wi-Fi Assist feature and using
2 aggregation mode performs the step of “contacting the selected RCGs with control information for
3 sending data to the requesting RCG.”

4 83. Apple devices perform the step of "sending packets of the data from the selected
5 RCGs to the requesting RCG" and/or Apple encourages others, such as cellular service providers
6 and wi-fi router providers, to perform this step. For example, an Apple device with an iOS having
7 the Wi-Fi Assist feature and using aggregation mode receives packets of data from the Wi-Fi and
8 cellular networks.

9 84. Any Apple device with an iOS having the Wi-Fi Assist feature and using
10 aggregation mode performs the step of "reassembling the packets of the data at the requesting
11 RCG; and relinquishing the bandwidth of each of the selected RCGs." For example, an Apple
12 device with an iOS having the Wi-Fi Assist feature reassembles the packets of data from the
13 cellular and Wi-Fi networks.

14 85. As such, Defendant Apple, without license or authorization to do so, has directly
15 infringed one or more claims of the '156 Patent, currently infringes, and will continue to infringe,
16 literally or under the doctrine of equivalents, one or more claims of the '156 Patent by making,
17 using, offering for sale and/or selling its Wi-Fi Assist Products within this District and elsewhere
18 in the United States, and/or importing into the United States its Accused Products, in violation of
19 35 U.S.C. § 271(a).

20 86. On information and belief, Apple has also indirectly infringed, currently indirectly
21 infringes, and will continue to indirectly infringe, literally or under the doctrine of equivalents, one
22 or more claims of the '156 Patent by actively, knowingly, and intentionally inducing infringement
23 by its customers and/or others of the '156 Patent in violation of 35 U.S.C. § 271(b).

24 87. Apple has been aware of the '156 Patent at least as early as June 12, 2014. See
25 Exhibit H.

26 88. Apple actively advertises, instructs, and encourages users and/or developers to use
27 its Apple Wi-Fi Assist Products in a manner that infringes one or more claims of the '156 Patent.
28 For example, Apple instructs product users to enable aggregation mode by “opening the Settings

app on your development iPhone and navigate to Developer, and then turn on Multipath Networking.” See Exhibit S at p. 1; see also Exhibit Q.

89. Defendant's past and continuing infringement of the '156 Patent by its sales and offers for sale of the Accused Products are causing economic harm to CAS, for which CAS is entitled to damages for past and continued infringement, in an amount to be determined by the Court but in no event less than a reasonable royalty.

COUNT TWO

(INFRINGEMENT OF U.S. PATENT NO. 8,228,801)

90. CAS repeats, re-alleges, and incorporates by reference the averments of paragraphs 1-89 of this Complaint as though fully set forth herein.

91. Apple's Accused Products infringe at least claim 1 of the '801 Patent.

92. By way of further illustrative infringement, claim 1 of the '801 Patent recites as follows:

1. A communications device that is capable of providing broadband communications services, comprising:

at least one connection for connecting to a communications network;

at least one wireless interface for connecting wirelessly to at least one remote communications device; and

a processor that requests the at least one remote communications device to assist in transferring data, sends a request to the at least one remote communications device for requesting use of a portion of unused bandwidth of the at least one remote communications device, receives a response from the at least one remote communications device, the response containing information about the portion of unused bandwidth, selects the at least one remote communications device with unused bandwidth, sends control information to the at least one remote communications device for participating in a multilink connection, receives packets from the at least one remote communications device and aggregates the data from the at least one remote communications device with data transfers from the at least one connection to increase data bandwidth for the communications device.

93. Any Apple device with an iOS having the Wi-Fi Assist feature is "[a] communications device that is capable of providing broadband communications services."

94. Any Apple device with an iOS having the Wi-Fi Assist feature has "at least one connection for connecting to a communications network." For example, an Apple device with an

iOS having the Wi-Fi Assist feature has a connection to the cellular network. See Exhibit R at p. 1 (describing a backup TCP connection of cellular data).

95. Any Apple device with an iOS having the Wi-Fi Assist feature has "at least one wireless interface for connecting wirelessly to at least one remote communications device." For example, an Apple device with an iOS having the Wi-Fi Assist feature can connect to a Wi-Fi router. See Exhibit R at p. 1 (describing a primary TCP connection over Wi-Fi).

96. Any Apple device with an iOS having the Wi-Fi Assist feature has "a processor that requests the at least one remote communications device to assist in transferring data." For example, an Apple device with an iOS having the Wi-Fi Assist feature has a processor that uses MPTCP to request assistance from the Wi-Fi router in transferring data. See Exhibit R at p. 1 (explaining that MPTCP relies on "middleboxes, such as routers or switches, between the iOS device and server" to connect to a destination host).

97. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that "sends a request to the at least one remote communications device for requesting use of a portion of unused bandwidth of the at least one remote communications device." For example, an Apple device with an iOS having the Wi-Fi Assist feature uses IEEE 802.11 WMM (WiFi Multimedia) Quality of Service (QOS) or TSPEC IEEE 802.11e.

98. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that "receives a response from the at least one remote communications device, the response containing information about the portion of unused bandwidth." For example, an Apple device with an iOS having the Wi-Fi Assist feature uses IEEE 802.11 WMM (WiFi Multimedia) Quality of Service (QOS) or TSPEC IEEE 802.11e.

99. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that "selects the at least one remote communications device with unused bandwidth." For example, an Apple device with an iOS having the Wi-Fi Assist feature uses IEEE 802.11 WMM (WiFi Multimedia) Quality of Service (QOS) or TSPEC IEEE 802.11e.

100. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that "sends control information to the at least one remote communications device for participating in a

1 multilink connection." For example, an Apple device with an iOS having the Wi-Fi Assist feature
2 uses MPTCP to send control information.

3 101. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that
4 "receives packets from the at least one remote communications device and aggregates the data
5 from the at least one remote communications device with data transfers from the at least one
6 connection to increase data bandwidth for the communications device." For example, an Apple
7 device with an iOS having the Wi-Fi Assist feature receives and aggregates data packets from the
8 cellular and Wi-Fi networks to increase data bandwidth. See Exhibit P at p.1 (explaining that
9 product users can enable aggregate mode to "maximize bandwidth across multiple interfaces").

10 102. As such, Defendant Apple, without license or authorization to do so, has directly
11 infringed one or more claims of the '801 Patent, literally or under the doctrine of equivalents, by
12 making, using, offering for sale and/or selling its Accused Products within this District and
13 elsewhere in the United States, and/or importing into the United States its Accused Products in
14 violation of 35 U.S.C. § 271(a).

15 103. On information and belief, Apple has also indirectly infringed, literally or under the
16 doctrine of equivalents, one or more claims of the '801 Patent by actively, knowingly, and
17 intentionally inducing infringement by its customers and/or others of the '801 Patent in violation
18 of 35 U.S.C. § 271(b).

19 104. Apple has been aware of the '801 Patent at least as early as June 12, 2014. See
20 Exhibit H.

21 105. Apple actively advertises, instructs, and encourages users and/or developers to use
22 its Apple Wi-Fi Assist Products in a manner that infringes one or more claims of the '801 Patent.
23 For example, Apple instructs product users to enable aggregation mode by "opening the Settings
24 app on your development iPhone and navigate to Developer, and then turn on Multipath
25 Networking." See Exhibit S at p. 1; see also Exhibit Q.

26 106. CAS is entitled to damages for past infringement in an amount to be determined by
27 the Court but in no event less than a reasonable royalty.
28

COUNT THREE

(INFRINGEMENT OF U.S. PATENT NO. 8,861,349)

107. CAS repeats, re-alleges, and incorporates by reference the averments of paragraphs 1-107 of this Complaint as though fully set forth herein.

108. Apple's Accused Products infringe at least claim 13 of the '349 Patent.

109. By way of further illustrative infringement, claim 13 of the '349 Patent recites as follows:

13. A device comprising:

an interface that establishes a network connection at a first location to a first network and receives first data packets over the network connection;

a wireless interface that is configured to establish a wireless connection to a remote communications device, the remote communications device being connected at a second location to a second network; and

a processor that sends a multilink request over the wireless interface to the remote communications device to join the multilink connection, receives from the interface the first data packets from the first network and when the multilink request is accepted by the remote communications device, concurrently receives from the wireless interface second data packets from the second network, the second data packets being received at the second location from the second network.

110. Any Apple device with an iOS having the Wi-Fi Assist feature has "an interface that establishes a network connection at a first location to a first network and receives first data packets over the network connection." For example, an Apple device with an iOS having the Wi-Fi Assist feature has a connection to the cellular network and receives data packets over the cellular network. See Exhibit R at p. 1 (describing a backup connection of cellular data).

111. Any Apple device with an iOS having the Wi-Fi Assist feature has "a wireless interface that is configured to establish a wireless connection to a remote communications device, the remote communications device being connected at a second location to a second network." For example, an Apple device with an iOS having the Wi-Fi Assist feature can connect to a Wi-Fi router which is connected to an internet service provider. See Exhibit R at p. 1 (explaining that MPTCP relies on "middleboxes, such as routers or switches, between the iOS device and server" to connect to a destination host).

1 112. Any Apple device with an iOS having the Wi-Fi Assist feature has "a processor
2 that sends a multilink request over the wireless interface to the remote communications device to
3 join the multilink connection." For example, an Apple device with an iOS having the Wi-Fi Assist
4 feature uses MPTCP to send a request to the Wi-Fi router to participate in a multilink connection.

5 113. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that
6 "receives from the interface the first data packets from the first network." For example, an Apple
7 device with an iOS having the Wi-Fi Assist feature receives data packets over the cellular network.
8 See Exhibit R at p. 1 (describing a backup connection over cellular data).

9 114. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that
10 "when the multilink request is accepted by the remote communications device, concurrently
11 receives from the wireless interface second data packets from the second network, the second data
12 packets being received at the second location from the second network." For example, an Apple
13 device with an iOS having the Wi-Fi Assist feature uses MPTCP to establish a multilink
14 connection using the cellular network and Wi-Fi network when the Wi-Fi router accepts the
15 multilink request. Thereafter, data packets are received concurrently from the cellular and Wi-Fi
16 networks.

17 115. As such, Defendant Apple, without license or authorization to do so, has directly
18 infringed one or more claims of the '349 Patent, literally or under the doctrine of equivalents, by
19 making, using, offering for sale and/or selling its Accused Products within this District and
20 elsewhere in the United States, and/or importing into the United States its Accused Products, in
21 violation of 35 U.S.C. § 271(a).

22 116. On information and belief, Apple has also indirectly infringed, literally or under the
23 doctrine of equivalents, one or more claims of the '349 Patent by actively, knowingly, and
24 intentionally inducing infringement by its customers and/or others of the '349 Patent in violation
25 of 35 U.S.C. § 271(b).

26 117. Apple has been aware of the '349 Patent at least as early as October 14, 2014. See
27 Exhibit I.
28

118. Apple actively advertises, instructs, and encourages users and/or developers to use its Apple Wi-Fi Assist Products in a manner that infringes one or more claims of the '349 Patent. For example, Apple instructs product users to enable aggregation mode by “opening the Settings app on your development iPhone and navigate to Developer, and then turn on Multipath Networking.” See Exhibit S at p. 1; see also Exhibit Q.

119. CAS is entitled to damages for past infringement in an amount to be determined by the Court but in no event less than a reasonable royalty.

COUNT FOUR

(INFRINGEMENT OF U.S. PATENT NO. 9,350,649)

120. CAS repeats, re-alleges, and incorporates by reference the averments of paragraphs 1-119

121. Apple’s Accused Products infringe at least claim 18 of the '649 Patent.

122. By way of further illustrative infringement, claim 18 of the '649 Patent recites as follows:

18. A data-requesting device comprising:

at least one interface capable of connecting concurrently to a plurality of network-edge devices during a multipath connection, the multipath connection comprising the connections between the data-requesting device and each of the network-edge devices; and

at least one processor coupled to the at least one interface that

sends multipath information to each of the network-edge devices that is capable of joining the multipath connection; and

receives different data at the data-requesting device from different ones of the network-edge devices that are able to join the multipath connection.

123. Any Apple device with an iOS having the Wi-Fi Assist feature is "a data-requesting device."

124. Any Apple device with an iOS having the Wi-Fi Assist feature has "at least one interface capable of connecting concurrently to a plurality of network-edge devices during a multipath connection, the multipath connection comprising the connections between the data-requesting device and each of the network-edge devices." For example, an Apple device with an

1 iOS having the Wi-Fi Assist feature can connect concurrently to a Wi-Fi router and a cellular
2 network. See Exhibit R at p.1 (Apple disclosing that “iPhone and iPad use MPTCP with an active
3 cellular data connection to make two connections: [a] primary TCP connection over Wi-Fi [and a]
4 backup connection over cellular data,” where “[i]f Wi-Fi becomes unavailable or unresponsive,
5 iOS uses the cellular data connection”).

6 125. An Apple device with an iOS having the Wi-Fi Assist feature has "at least one
7 processor coupled to the at least one interface[.]" For example, an Apple device with an iOS having
8 the Wi-Fi Assist feature has a processor that is coupled with Wi-Fi. See Exhibit O at p. 1. (“While
9 the user’s device is connected to a reliable Wi-fi network, your app uses only Wi-Fi, and no cellular
10 data is consumed”).

11 126. An Apple device with an iOS having the Wi-Fi Assist feature has a processor that
12 "sends multipath information to each of the network-edge devices that is capable of joining the
13 multipath connection[.]"

14 127. An Apple device with an iOS having the Wi-Fi Assist feature has a processor that
15 is capable of receiving "different data at the data-requesting device from different ones of the
16 network-edge devices that are able to join the multipath connection."

17 128. Defendant Apple, without license or authorization to do so, has directly infringed
18 one or more claims of the '649 Patent, literally or under the doctrine of equivalents, by making,
19 using, offering for sale and/or selling its Wi-Fi Assist Products within this District and elsewhere
20 in the United States, and/or importing into the United States its Accused Products, in violation of
21 35 U.S.C. § 271(a).

22 129. On information and belief, Apple has also indirectly infringed, literally or under the
23 doctrine of equivalents, one or more claims of the '649 Patent by actively, knowingly, and
24 intentionally inducing infringement by its customers and/or others of the '649 Patent in violation
25 of 35 U.S.C. § 271(b).

26 130. Apple has been aware of the '649 Patent at least as early as May 24, 2016. See
27 Exhibit J.
28

131. Apple actively advertises, instructs, and encourages users and/or developers to use its Apple Wi-Fi Assist Products in a manner that infringes one or more claims of the '649 Patent. For example, Apple instructs product users to enable aggregation mode by “opening the Settings app on your development iPhone and navigate to Developer, and then turn on Multipath Networking.” See Exhibit S at p. 1; see also Exhibit Q.

132. CAS is entitled to damages for past infringement in an amount to be determined by the Court but in no event less than a reasonable royalty.

COUNT FIVE

(INFRINGEMENT OF U.S. PATENT NO. 10,868,908)

133. CAS repeats, re-alleges, and incorporates by reference the averments of paragraphs 1-132 of this Complaint as though fully set forth herein.

134. For example, Apple’s Accused Products infringe at least claim 17 of the '908 Patent.

135. By way of further illustrative infringement, claim 17 of the '908 Patent reads as follows:

17. A client device for multilink communication, the client device comprising:
 a first network interface having a first data transfer rate associated therewith;
 a second network interface having a second data transfer rate associated therewith;
 and
 at least one processor and configured to:
 transmit a first message through the first network interface to at least one server, wherein the first message includes a multilink request and a destination URL;
 transmit a second message through the second network interface to the at least one server, wherein the second message includes a multilink session identification that is unique to the multilink session and the destination URL; and
 receive concurrently the different data packets from the server through the first network interface and the second network interface of the client device during the multilink session, wherein the first data transfer rate and the second data transfer rate provide an increase in the data transfer rate of the client device.

1 136. Any Apple device with an iOS having the Wi-Fi Assist feature is a “client device
2 for multilink communication.” For example, any Apple device with an iOS having the Wi-Fi Assist
3 feature can communicate with remote devices through at least two links, Wi-Fi and cellular. See
4 Exhibit R at p. 1.

5 137. Any Apple device with an iOS having the Wi-Fi Assist feature has “a first network
6 interface having a first data transfer rate associated therewith.” For example, any Apple device
7 with an iOS having the Wi-Fi Assist feature has a Wi-Fi interface with a first data transfer rate
8 associated with it.

9 138. Any Apple device with an iOS having the Wi-Fi Assist feature has “a second
10 network interface having a second data transfer rate associated therewith.” For example, any
11 Apple device with an iOS having the Wi-Fi assist feature has a cellular interface with a second
12 data transfer rate associated with it.

13 139. Any Apple device with an iOS having the Wi-Fi Assist feature has “at least one
14 processor.”

15 140. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor
16 configured to “transmit a first message through the first network interface to at least one server,
17 wherein the first message includes a multilink request and a destination URL.” For example, any
18 Apple device with an iOS having the Wi-Fi assist feature can connect to, and transmit a first
19 message through, a cellular network and a server using MPTCP.

20 141. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor
21 configured to “transmit a second message through the second network interface to the at least one
22 server, wherein the second message includes a multilink session identification that is unique to the
23 multilink session and the destination URL.” For example, any Apple device with an iOS having
24 the Wi-Fi assist feature can connect to, and transmit a second message through, a Wi-Fi router and
25 a server using MPTCP.

26 142. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor
27 configured to “receive concurrently the different data packets from the server through the first
28 network interface and the second network interface of the client device during the multilink

1 session, wherein the first data transfer rate and the second data transfer rate provide an increase in
2 the data transfer rate of the client device.” For example, any Apple device with an iOS having the
3 Wi-Fi Assist feature receives and aggregates data packets from a server through the cellular and
4 Wi-Fi networks to increase data bandwidth.

5 143. As such, Defendant Apple, without license or authorization to do so, has directly
6 infringed one or more claims of the '908 Patent, literally or under the doctrine of equivalents, by
7 making, using, offering for sale and/or selling its Accused Products within this District and
8 elsewhere in the United States, and/or importing into the United States its Accused Products, in
9 violation of 35 U.S.C. § 271(a).

10 144. On information and belief, Apple has also indirectly infringed, currently indirectly
11 infringes, literally or under the doctrine of equivalents, one or more claims of the '908 Patent by
12 actively, knowingly, and intentionally inducing infringement by its customers and/or others of the
13 '908 Patent in violation of 35 U.S.C. § 271(b).

14 145. Apple has been aware of the '908 Patent at least as early as October 2, 2023. See
15 Exhibit K.

16 146. Apple actively advertises, instructs, and encourages users and/or developers to use
17 its Apple Wi-Fi Assist Products in a manner that infringes one or more claims of the '908 Patent.
18 For example, Apple instructs product users to enable aggregation mode by “opening the Settings
19 app on your development iPhone and navigate to Developer, and then turn on Multipath
20 Networking.” See Exhibit S at p. 1; see also Exhibit Q.

21 147. CAS is entitled to damages for past infringement in an amount to be determined by
22 the Court but in no event less than a reasonable royalty.

23 **COUNT SIX**

24 **(INFRINGEMENT OF U.S. PATENT NO. 11,418,641)**

25 148. CAS repeats, re-alleges, and incorporates by reference the averments of paragraphs
26 1-147 of this Complaint as though fully set forth herein.

27 149. For example, Apple’s Accused Products infringe at least claim 1 of the '641 Patent.
28

150. By way of further illustrative infringement, claim 1 of the '649 Patent recites as follows:

1. A communications device that is capable of providing broadband communications services, comprising:

at least one connection for connecting to a communications network;

at least one wireless interface for connecting wirelessly to at least one remote communications device; and

a processor that

requests the at least one remote communications device to assist in transferring data,

sends a request to the at least one remote communications device for availability for participating in a multilink communication,

if available, sends control information through the at least one remote communications device for participating in a multilink connection,

receives packets from the at least one remote communications device, and

aggregates the data from the at least one remote communications device with data transfers from the at least one connection to increase data bandwidth for the communications device.

151. Any Apple device with an iOS having the Wi-Fi Assist feature is "a communications device that is capable of providing broadband communications services." For example, any Apple device with an iOS having the Wi-Fi assist feature can communicate with remote devices through at least two connections, Wi-Fi and cellular. See Exhibit R at p. 1

152. Any Apple device with an iOS having the Wi-Fi Assist feature has "at least one connection for connecting to a communications network." For example, an Apple device with an iOS having the Wi-Fi Assist feature has a connection to a cellular network. See Exhibit R at p. 1 (describing a backup connection of cellular data).

153. Any Apple device with an iOS having the Wi-Fi Assist feature has "at least one wireless interface for connecting wirelessly to at least one remote communications device." For example, an Apple device with an iOS having the Wi-Fi Assist feature can connect to a Wi-Fi router. See Exhibit R at p. 1 (explaining that MPTCP relies on "middleboxes, such as routers or switches, between the iOS device and server" to connect to a destination host).

1 154. Any Apple device with an iOS having the Wi-Fi Assist feature has "a processor
2 that requests the at least one remote communications device to assist in transferring data." For
3 example, an Apple device with an iOS having the Wi-Fi Assist feature uses MPTCP to request
4 assistance from the Wi-Fi router in transferring data.

5 155. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that
6 "sends a request to the at least one remote communications device for availability for participating
7 in a multilink communication." For example, an Apple device with an iOS having the Wi-Fi Assist
8 feature uses MPTCP to send a request to the Wi-Fi router for availability for participating in a
9 multilink communication.

10 156. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that
11 "if available, sends control information through the at least one remote communications device for
12 participating in a multilink connection." For example, an Apple device with an iOS having the
13 Wi-Fi Assist feature uses MPTCP to send control information through the Wi-Fi router for
14 participating in a multilink connection.

15 157. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that
16 "receives packets from the at least one remote communications device." For example, an Apple
17 device with an iOS having the Wi-Fi Assist feature has a processor that receives data from both a
18 cellular tower and Wi-Fi router during a multipath connection with a remote host.

19 158. Any Apple device with an iOS having the Wi-Fi Assist feature has a processor that
20 "aggregates the data from the at least one remote communications device with data transfers from
21 the at least one connection to increase data bandwidth for the communications device." For
22 example, an Apple device with an iOS having the Wi-Fi Assist feature aggregates the data from
23 the cellular and Wi-Fi connection to increase bandwidth. Exhibit S at p. 1 (describing aggregate
24 mode as "a service that aggregates the capacities of other Multipath options in an attempt to
25 increase throughput and minimize latency").

26 159. As such, Defendant Apple, without license or authorization to do so, has directly
27 infringed one or more claims of the '641 Patent, literally or under the doctrine of equivalents, by
28 making, using, offering for sale and/or selling its Accused Products within this District and

elsewhere in the United States, and/or importing into the United States its Accused Products, in violation of 35 U.S.C. § 271(a).

160. On information and belief, Apple has also indirectly infringed, literally or under the doctrine of equivalents, one or more claims of the '641 Patent by actively, knowingly, and intentionally inducing infringement by its customers and/or others of the '641 Patent in violation of 35 U.S.C. § 271(b).

161. Apple has been aware of the '641 Patent at least as early as October 2, 2023. See Exhibit K.

162. Apple actively advertises, instructs, and encourages users and/or developers to use its Apple Wi-Fi Assist Products in a manner that infringes one or more claims of the '641 Patent. For example, Apple instructs product users to enable aggregation mode by “opening the Settings app on your development iPhone and navigate to Developer, and then turn on Multipath Networking.” See Exhibit S at p. 1; see also Exhibit Q.

163. CAS is entitled to damages for past infringement in an amount to be determined by the Court but in no event less than a reasonable royalty.

COUNT SEVEN

(INFRINGEMENT OF U.S. PATENT NO. 11,582,343)

164. CAS repeats, re-alleges, and incorporates by reference the averments of paragraphs 1-163 of this Complaint as though fully set forth herein.

165. For example, Apple’s Accused Products infringe at least claim 12 of the '343 Patent.

166. By way of further illustrative infringement, claim 12 of the '343 Patent recites as follows:

12. A communication device capable of providing broadband communications services comprising:

a first connection via a first device to a first network having a first bandwidth including an allocated first portion of the first bandwidth;

a second connection via a second device to a second network having a second bandwidth including an allocated second portion of the second bandwidth; and

a third connection to a remote device via the first network and the second network, the third connection having an effective bandwidth including the allocated first

1 portion of the first bandwidth and the allocated second portion of the second
2 bandwidth;

3 wherein, in response to transmitting a request to the remote device via the third
4 connection, the communication device receives a response from the remote device
5 wherein a portion of the response is received via the first network and a portion of
6 the response is received via the second network.

7 167. Any Apple device with an iOS having the Wi-Fi Assist feature is “communication
8 device capable of providing broadband communications services.”

9 168. Any Apple device with an iOS having the Wi-Fi Assist feature has a “first
10 connection via a first device to a first network having a first bandwidth including an allocated first
11 portion of the first bandwidth.” For example, an Apple device with an iOS having the Wi-Fi Assist
12 feature can connect to a cellular network.

13 169. Any Apple device with an iOS having the Wi-Fi Assist feature has a “a second
14 connection via a second device to a second network having a second bandwidth including an
15 allocated second portion of the second bandwidth.” For example, an Apple device with an iOS
16 having the Wi-Fi Assist feature can establish a Wi-Fi connection.

17 170. Any Apple device with an iOS having the Wi-Fi Assist feature has a “a third
18 connection to a remote device via the first network and the second network, the third connection
19 having an effective bandwidth including the allocated first portion of the first bandwidth and the
20 allocated second portion of the second bandwidth.” For example, an Apple device with an iOS
21 having the Wi-Fi Assist feature aggregates data from the cellular and Wi-Fi connection.

22 171. Any Apple device with an iOS having the Wi-Fi Assist feature, “wherein, in
23 response to transmitting a request to the remote device via the third connection, the communication
24 device receives a response from the remote device wherein a portion of the response is received
25 via the first network and a portion of the response is received via the second network.” For
26 example, an Apple device with an iOS having the Wi-Fi Assist feature aggregates data from the
27 cellular and Wi-Fi connection.

28 172. Defendant Apple, without license or authorization to do so, has directly infringed
one or more claims of the '343 Patent, literally or under the doctrine of equivalents, by making,
using, offering for sale and/or selling its Accused Products within this District and elsewhere in

the United States, and/or importing into the United States its Accused Products, in violation of 35 U.S.C. § 271(a).

173. On information and belief, Apple has also indirectly infringed, literally or under the doctrine of equivalents, one or more claims of the '343 Patent by actively, knowingly, and intentionally inducing infringement by its customers and/or others of the '343 Patent in violation of 35 U.S.C. § 271(b).

174. Apple has been aware of the '343 Patent at least as early as October 2, 2023. See Exhibit K.

175. Apple actively advertises, instructs, and encourages users and/or developers to use its Apple Wi-Fi Assist Products in a manner that infringes one or more claims of the '343 Patent. For example, Apple instructs product users to enable aggregation mode by “opening the Settings app on your development iPhone and navigate to Developer, and then turn on Multipath Networking.” See Exhibit S at p. 1; see also Exhibit Q.

176. CAS is entitled to damages for past infringement from February 14, 2023, to October 14, 2023, in an amount to be determined by the Court but in no event less than a reasonable royalty.

PRAYER FOR RELIEF

WHEREFORE, CAS respectfully requests that the Court find in its favor and against Defendant Apple Inc., and that the Court grant CAS the following relief:

- a. A judgment in favor of CAS that Apple has infringed one or more claims of the following Asserted Patents of CAS: 7,606,156; 8,228,801; 8,861,349; 9,350,649; 10,868,908; 11,418,641; and 11,582,343;
- b. An accounting of and an award to CAS of damages adequate to compensate CAS for Apple's acts of infringement, including a reasonable royalty, and also including supplemental damages for any post-verdict infringement up until entry of final judgment with an accounting as needed, together with pre-judgment and post-judgment interest pursuant to 35 U.S.C. § 284;

- c. Finding Apple's infringement to be willful and an award to CAS of enhanced damages in an amount up to treble the amount of compensatory damages as justified under 35 U.S.C. § 284 for Apple's willful infringement;
- d. A declaration that this is an exceptional case, including, an award to CAS of its costs, expenses, and reasonable attorneys' fees under 35 U.S.C. § 285 and all other applicable statutes and rules in common law as may apply;
- e. An award to CAS of its costs pursuant to 35 U.S.C. § 284 and/or Fed. R. Civ. P. 54(d); and
- f. An award of any such further relief that the Court deems just and proper.

JURY DEMAND

CAS hereby demands a jury trial on all issues so triable.

Dated: May 30, 2025

Respectfully submitted,

By: /s/ Duane H. Mathiowetz

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