IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

INTELLECTUAL VENTURES I LLC and INTELLECTUAL VENTURES II LLC,	)	
	)	**C.A. No. 4:24-cv-00980-ALM**
Plaintiffs,	)	
	)	
v.	)	**JURY TRIAL DEMANDED**
	)	
AMERICAN AIRLINES, INC.	)	
	)	
Defendant.	)	

AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs Intellectual Ventures I LLC and Intellectual Ventures II LLC (collectively, "Intellectual Ventures," "IV," or "Plaintiffs"), in their Amended Complaint for patent infringement against Defendant American Airlines, Inc. ("American" or "Defendant"), hereby alleges as follows:

NATURE OF THE ACTION

1. This is a civil action for the infringement of United States Patent No. 8,332,844 ("the '844 Patent"), United States Patent No. 8,407,722 ("the '722 Patent"), United States Patent No. 7,949,785 ("the '785 Patent"), United States Patent No. 8,027,326 ("the '326 Patent"), United States Patent No. 7,324,469 ("the '469 Patent"), United States Patent No. 7,257,582 ("the '582 Patent"), United States Patent No. 7,712,080 ("the '080 Patent"), United States Patent No. 7,721,282 ("the '282 Patent"), United States Patent No. 7,822,841 ("the '841 Patent"), United States Patent No. 8,352,584 ("the '584 Patent"), United States Patent No. 11,032,000 ("the '000 Patent"), and United States Patent No. 10,103,845 ("the '845 Patent") (collectively, the "Patents-in-Suit") under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq*.

THE PARTIES

Intellectual Ventures

2. Plaintiff Intellectual Ventures I LLC ("Intellectual Ventures I") is a Delaware limited liability company having its principal place of business located at 14360 SE Eastgate Way, Bellevue, WA 98007.

3. Plaintiff Intellectual Ventures II LLC ("Intellectual Ventures II") is a Delaware limited liability company having its principal place of business located at 14360 SE Eastgate Way, Bellevue, WA 98007.

4. Intellectual Ventures I is the owner of all rights, title, and interest in and to the '722, '582, '326, '845, and '785 Patents, and is the exclusive licensee of the '080 Patent.

5. Intellectual Ventures II is the owner of all rights, title, and interest in and to the '844, '282, '841, '584, '000, and '469 Patents.

American Airlines, Inc.

6. Upon information and belief, Defendant American Airlines, Inc. ("American") is a Delaware corporation with its principal place of business at One Skyview Drive, Fort Worth, Texas 76155. American is registered to do business in the State of Texas and has been since at least June 13, 1934. On information and belief, American does business in the State of Texas and the Eastern District of Texas.

7. Upon information and belief, American makes, utilizes, services, tests, distributes, sells, offers, and/or offers for sale in the State of Texas and the Eastern District of Texas products, services, and technologies ("Accused Products and Services") that infringe the Patents-in-Suit, contributes to the infringement by others, and/or induces others to commit acts of patent infringement in the State of Texas and the Eastern District of Texas.

8. On information and belief, American has derived substantial revenue from infringing acts in the Eastern District of Texas, including from the sale and use of the Accused Products and Services as described in more detail below.

JURISDICTION AND VENUE

9. This is an action for patent infringement arising under the patent laws of the United States. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

10. This Court has personal jurisdiction over American because American conducts business in and has committed acts of patent infringement, contributed to infringement by others, and/or induced others to commit acts of patent infringement in this District, the State of Texas, and elsewhere in the United States, and has established minimum contacts with this forum state such that the exercise of jurisdiction over American would not offend the traditional notions of fair play and substantial justice. Upon information and belief, American transacts substantial business with entities and individuals in the State of Texas and the Eastern District of Texas, by, among other things, making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Accused Products and Services that infringe the Patents-in-Suit, as well as by providing service and support to its customers in this District. American also places certain of the Accused Products and Services into the stream of commerce with the knowledge and expectation that they will be sold in the State of Texas, including this District. For example, American provides Wi-Fi service for its customers and/or employees on American airplanes within this District.

11. American is subject to this Court's general and specific jurisdiction pursuant to due process and/or the Texas Long Arm Statute due at least to American's substantial business in the State of Texas and this District, including maintaining its principal place of business at One Skyview Drive, Fort Worth, Texas 76155, through its past infringing activities, because

American regularly does and solicits business herein, and/or because American has engaged in persistent conduct and/or has derived substantial revenues from goods and services provided to customers in the State of Texas and this District.

12. Upon information and belief, American is a corporation organized and existing under the laws of Texas with a principal place of business located at One Skyview Drive, Fort Worth, Texas 76155. On information and belief, American does business itself, or through its subsidiaries, affiliates, and agents, in the State of Texas and the Eastern District of Texas.

13. Upon information and belief, American flies to 18 destinations[1] within Texas in addition to several local routes through its regional brand, American Eagle Airlines.

14. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b) because American maintains numerous regular and established places of business in this District, and has committed and continues to commit acts of infringement in this District giving rise to this Action.

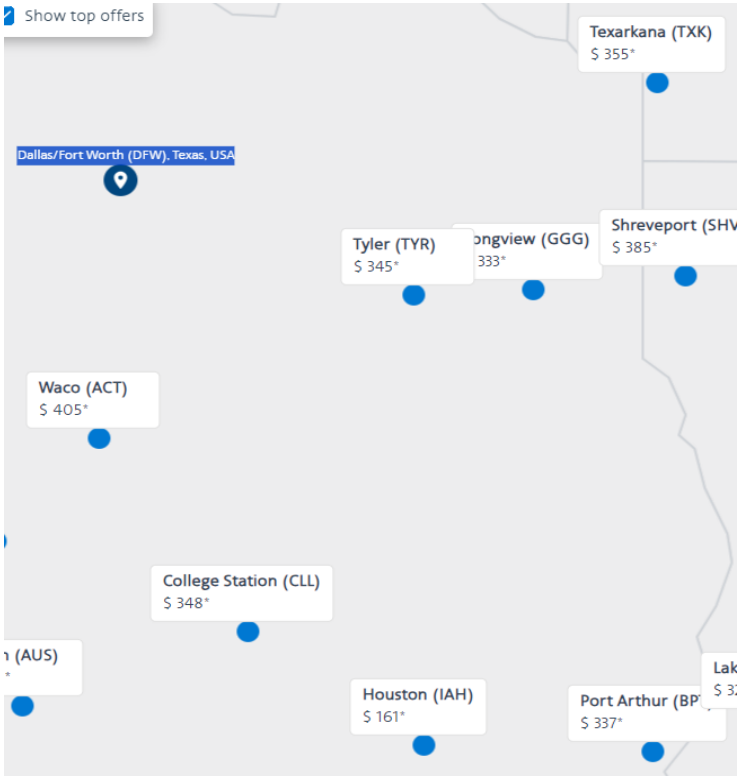
15. Upon information and belief, American Airlines maintains regular and established places of business via terminals, airplanes, operations centers, ticket counters, as well as other equipment and facilities at airports located in this district. For example, American serves several airports in the Eastern District of Texas: (1) Tyler Pounds Regional Airport (TYR) – located at 700 Skyway Blvd, Tyler, TX 75704; (2) East Texas Regional Airport (GGG) – located at 269 Terminal Cir, Longview, TX 75603; (3) Texarkana Regional Airport (TXK) – located at 2600 Txk Blvd, Texarkana, AR 71854; (4) Easterwood Airport (CLL) – located at 1 McKenzie Terminal Blvd, College Station, TX 77845; and (5) Jack Brooks Regional Airport (BPT) – located at US-69, Beaumont, TX 77705 (collectively "American Airport Locations").

[1] https://www.aa.com/en-us/flights-to-texas (Last Accessed on 10/9/2024).

16. Upon information and belief, American holds these American Airport Locations to be regular and established places of business of American in this District by operating flights, selling tickets, and servicing customers at these locations.

17. Upon information and belief, the American Airport Locations in this District are regular, continuous, and established physical places of business of American, being established, ratified, and/or controlled by American as authorized locations, which are places of business at which American makes, utilizes, services, tests, distributes, offers and/or offers for sale the Accused Products and Services.

18. Upon information and belief, American ratifies and holds these American Airport Locations out as regular and established places of business of American in this District by listing them on American's website, including, *e.g.*, as shown below.[2]



[2] https://www.aa.com/en-us/fare-finder-map. (Last Accessed on 10/9/2024).

19. Upon information and belief, American has established, ratified, and holds these American Locations out as regular and established places of business of American by directing and controlling these American Location's actions and services in the foregoing manner, and has consented to these American Locations acting on American's behalf and being American's places of business whereby the Accused Products and Services and utilized, serviced, tested, distributed, offered, and/or offered for sale and placed into the stream of commerce in this District, and these American Locations have consented to act on American's behalf pursuant to the foregoing terms of control and direction in order to, among other things, be able to offer flight services that utilize the Accused Products and Services.

FACTUAL BACKGROUND

20. Intellectual Ventures Management, LLC ("Intellectual Ventures Management") was founded in 2000. Since then, Intellectual Ventures Management has been involved in the business of inventing. Intellectual Ventures Management facilitates invention by inventors and the filing of patent applications for those inventions, collaboration with others to develop and patent inventions, and the acquisition and licensing of patents from individual inventors, universities, corporations, and other institutions. A significant aspect of Intellectual Ventures Management's business is managing the Plaintiffs in this case, Intellectual Ventures I and Intellectual Ventures II.

21. One of the founders of Intellectual Ventures Management is Nathan Myhrvold, who worked at Microsoft from 1986 until 2000 in a variety of executive positions, culminating in his appointment as the company's first Chief Technology Officer ("CTO") in 1996. While at Microsoft, Dr. Myhrvold founded Microsoft Research in 1991 and was one of the world's foremost

software experts. Between 1986 and 2000, Microsoft became the world's largest technology company.

22. Under Dr. Myhrvold's leadership, Intellectual Ventures acquired more than 70,000 patents covering many important inventions used in the airline and avionics industries.

23. American offers various types of airline and avionics related services and technologies to its customers, partners, vendors, customers, and/or third parties. American's products and services utilize and/or support various technologies, including but not limited to Kubernetes, Kafka, Docker, Spark, Hadoop, In-Flight and Ground Connectivity, and Internet Hotspots. Certain of these products and services, such as In-Flight and Ground Connectivity and Internet Hotspots, are offered to American's customers and use WiFi and cellular technologies, managed by American, to enable American products and services that it further offers to its customers and/or employees. Certain of these products and services, such as Kubernetes, Kafka, Docker, Spark, and Hadoop, are technologies used and managed by American to enable the various products and services that American offers to its customers. American makes, utilizes, services, tests, distributes, offers, and/or offers for sale these products and services throughout the world, including in the United States and Texas.

THE PATENTS-IN-SUIT

U.S. Patent No. 8,332,844

24. On December 11, 2012, the PTO issued the '844 Patent, titled "Root Image Caching and Indexing for Block-Level Distributed Application Management." The '844 Patent is valid and enforceable. A copy of the '844 Patent is attached as Exhibit 1.

25. Intellectual Ventures II is the owner of all rights, title, and interest in and to the ’844 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’844 Patent.

U.S. Patent No. 8,407,722

26. On March 26, 2013, the PTO issued the ’722 Patent, titled “Asynchronous Messaging Using a Node Specialization Architecture in the Dynamic Routing Network.” The ’722 Patent is valid and enforceable. A copy of the ’722 Patent is attached as Exhibit 2.

27. Intellectual Ventures I is the owner of all rights, title, and interest in and to the ’722 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’722 Patent.

U.S. Patent No. 7,949,785

28. On May 24, 2011, the PTO issued the ’785 Patent, titled “Secure Virtual Community Network System.” The ’785 Patent is valid and enforceable. A copy of the ’785 Patent is attached as Exhibit 3.

29. Intellectual Ventures I is the owner of all rights, title, and interest in and to the ’785 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’785 Patent.

U.S. Patent No. 8,027,326

30. On September 27, 2011, the PTO issued the ’326 Patent, titled “Method and System for High Data Rate Multi-Channel WLAN Architecture.” The ’326 Patent is valid and enforceable. A copy of the ’326 Patent is attached as Exhibit 4.

31. Intellectual Ventures I is the owner of all rights, title, and interest in and to the ’326 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’326 Patent.

U.S. Patent No. 7,324,469

32. On January 29, 2008, the PTO issued the ’469 Patent, titled “Satellite Distributed High Speed Internet Access.” The ’469 Patent is valid and enforceable. A copy of the ’469 Patent is attached as Exhibit 5.

33. Intellectual Ventures II is the owner of all rights, title, and interest in and to the ’469 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’469 Patent.

U.S. Patent No. 7,257,582

34. On August 14, 2007, the PTO issued the ’582 Patent, titled “Load Balancing with Shared Data.” The ’582 Patent is valid and enforceable. A copy of the ’582 Patent is attached as Exhibit 6.

35. Intellectual Ventures I is the owner of all rights, title, and interest in and to the ’582 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’582 Patent.

U.S. Patent No. 7,712,080

36. On May 4, 2010, the PTO issued the ’080 Patent, titled “Systems and Methods for Parallel Distributed Programming.” The ’080 Patent is valid and enforceable. A copy of the ’080 Patent is attached as Exhibit 15.

37. Intellectual Ventures I LLC is the exclusive licensee under the ’080 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’080 Patent.

U.S. Patent No. 7,721,282

38. On May 18, 2010, the PTO issued the ’282 Patent, titled “Block-Level I/O Subsystem For Distributed Application Environment Management.” The ’282 Patent is valid and enforceable. A copy of the ’282 Patent is attached as Exhibit 20.

39. Intellectual Ventures II LLC is the owner of all rights, title, and interest in and to the ’282 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’282 Patent.

U.S. Patent No. 7,822,841

40. On October 26, 2010, the PTO issued the ’841 Patent, titled “Method and System for Hosting Multiple, Customized Computing Clusters.” The ’841 Patent is valid and enforceable. A copy of the ’841 Patent is attached as Exhibit 16.

41. Intellectual Ventures II LLC is the owner of all rights, title, and interest in and to the ’841 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’841 Patent.

U.S. Patent No. 8,352,584

42. On January 8, 2013, the PTO issued the ’584 Patent, titled “Systems for Hosting Customized Computing Clusters.” The ’584 Patent is valid and enforceable. A copy of the ’584 Patent is attached as Exhibit 17.

43. Intellectual Ventures II LLC is the owner of all rights, title, and interest in and to the ’584 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’584 Patent.

U.S. Patent No. 11,032,000

44. On June 8, 2021, the PTO issued the ’000 Patent, titled “Communications in a Wireless Network.” The ’000 Patent is valid and enforceable. A copy of the ’000 Patent is attached as Exhibit 18.

45. Intellectual Ventures II LLC is the owner of all rights, title, and interest in and to the ’000 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’000 Patent.

U.S. Patent No. 10,103,845

46. On October 16, 2018, the PTO issued the ’845 Patent, titled “Dual Mode Communication Systems and Methods.” The ’845 Patent is valid and enforceable. A copy of the ’845 Patent is attached as Exhibit 19.

47. Intellectual Ventures I LLC is the owner of all rights, title, and interest in and to the ’845 Patent, and holds all substantial rights therein, including the right to grant licenses, to exclude others, and to enforce and recover past damages for infringement of the ’845 Patent.

COUNT I

(American’s Infringement of U.S. Patent No. U.S. Patent No. 8,332,844)

48. Paragraphs 1 through 47 are incorporated by reference as if fully set forth herein.

49. **Direct Infringement.** American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the ’844 Patent, by making, utilizing, servicing, testing, distributing,

selling, offering, and/or offering for sale the Accused Products and Services that infringe the ’844 Patent, including but not limited to at least the Accused Products and Services identified in the example chart incorporated, per paragraph 48 below, into this Count (collectively, “Example American Count I Products and Services”) that infringe at least the example claims of the ’844 Patent identified in the chart incorporated into this Count (the “Example ’844 Patent Claims”) literally or by the doctrine of equivalents.

50. On information and belief, American has also infringed and continues to directly infringe literally or under the doctrine of equivalents, the Example ’844 Patent Claims, by internal testing and use of the Example American Count I Products and Services.

51. Each claim of the ’844 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. For example, the ’844 Patent is related to root image caching and indexing for block-level distributed application management. The ’844 Patent discloses and claim systems and methods that address technical problems that are inherent in and derive from prior art methods and systems involving the problems of updating the boot image(s) for the cluster, among other issues. The ’844 Patent addressed this technical problem and others with a technical solution. Additionally, the claims of the ’844 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

52. Each claim of the ’844 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’844 Patent.

53. American has known that its infringing products and services, such as the Example Count I Products and Services, cannot be used without infringing the technology claimed in the ’844 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

54. **Willful Blindness.** American knew of the ’844 Patent, or should have known of the ’844 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’844 Patent not later than receipt of a letter, dated September 30, 2024, and received on the same date. By the time of trial, American will have known (since receiving such notice) that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’844 Patent. *See* Exhibit 7 (Notice Letter).

55. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’844 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or cause to use its products and services, such as Example American Count I Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’844 Patent. For example, on information and belief, American offers products and services to its customers and third parties and/or employees that are associated with backend functionality provided by the Example American Count I Products and Services. American has contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’844 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with backend functionality provided by the Example American Count I Products and Services.

56. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’844 Patent with knowledge of the ’844 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’844 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third- parties who use the Example American Count I Products and Services to infringe the ’844 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count I Products and Services.

57. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’844 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in infringement of the ’844 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

58. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’844 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Example American Count I Products and Services for use in a manner that infringes one or more claims of the ’844 Patent. Example

American Count I Products and Services are especially made or adapted for infringing the ’844 Patent and have no substantial non-infringing use.

59. Exhibit 8 (claim chart) includes the Example American Count I Products and Services and Example ’844 Patent Claims. As set forth in the chart, the Example American Count I Products and Services practice the technology claimed by the ’844 Patent. Accordingly, the Example American Count I Products and Services incorporated in the chart satisfies all elements of the Example ’844 Patent Claims.

60. IV therefore incorporates by reference in its allegations herein the claim chart of Exhibit 8.

61. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’844 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

62. Further, Defendant’s infringement of Intellectual Ventures’ rights under the ’844 Patent will continue to damage Intellectual Ventures’ business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

63. As a result of Defendant’s acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT II

(American’s Infringement of U.S. Patent No. 8,407,722)

64. Paragraphs 1 through 63 are incorporated by reference as if fully set forth herein.

65. **Direct Infringement.** American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the ’722 Patent, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Accused Products and Services that infringe the ’722 Patent, including but not limited to at least the Accused Products and Services identified in the example chart incorporated, per paragraph 64 below, into this Count (collectively, “Example American Count II Products and Services”) that infringed at least the example claims of the ’722 Patent identified in the chart incorporated into this Count (the “Example ’722 Patent Claims”) literally or by the doctrine of equivalents.

66. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example ’722 Patent Claims, by internal testing and use of the Example American Count II Products and Services.

67. Each claim of the ’722 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. For example, the ’722 Patent is related to a dynamic content routing network that routes update messages including updates to properties of live objects to clients. The ’722 Patent discloses and claims systems and methods that address technical problems that are inherent in and derive from prior art methods and systems involving the problems of dynamically updating content at a client device, among other issues. The ’722 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’722 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

68. Each claim of the ’722 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’722 Patent.

69. American has known that its infringing products and services, such as the Example American Count II Products and Services, cannot be used without infringing the technology claimed in the ’722 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

70. **Willful Blindness.** American knew of the ’722 Patent, or should have known of the ’722 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’722 Patent not later than receipt of a letter, dated September 30, 2024 and received on the same date. By the time of trial, American will have known and intended (since receiving such notice) that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’722 Patent. *See* Exhibit 7 (Notice Letter).

71. **Induced Infringement**. American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’722 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use its products and services, such as Example American Count II Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’722 Patent. For example, on information and belief, American offers products and services to its customers and third parties and/or employees that are associated with backend functionality provided by the Example American Count II Products and Services. American has contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’722 Patent by offering such products and services and contributing to and/or

inducing its customers and third parties and/or employees to use such products and services that are associated with backend functionality provided by the Example American Count II Products and Services.

72. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’722 Patent with knowledge of the ’722 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’722 Patent American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count II Products and Services to infringe the ’722 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count II Products and Services.

73. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’722 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in infringement of the ’722 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

74. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’722 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing,

distributing, selling, offering, and/or offering for sale Example American Count II Products and Services for use in a manner that infringes one or more claims of the ’722 Patent. Example American Count II Products and Services are especially made or adapted for infringing the ’722 Patent and have no substantial non-infringing use.

75. Exhibit 9 (claim chart) includes the Example American Count II Products and Services and Example ’722 Patent Claims. As set forth in the chart, the Example American Count II Products and Services practice the technology claimed by the ’722 Patent. Accordingly, the Example American Count II Products and Services incorporated in the chart satisfies all elements of the Example ’722 Patent Claims.

76. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 9.

77. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’722 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

78. Further, Defendant’s infringement of Intellectual Ventures’ rights under the ’722 Patent will continue to damage Intellectual Ventures’ business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

79. As a result of Defendant’s acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT III

(American's Infringement of U.S. Patent No. 7,949,785)

80. Paragraphs 1 through 79 are incorporated by reference as if fully set forth herein.

81. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '785 Patent, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Accused Products and Services that infringe the '785 Patent, including but not limited to at least the Accused Products and Services identified in the example chart incorporated, per paragraph 80 below, into this Count (collectively, "Example American Count III Products and Services") that infringe at least the example claims of the '785 Patent identified in the chart incorporated into this Count (the "Example '785 Patent Claims") literally or by the doctrine of equivalents.

82. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '785 Patent Claims, by internal testing and use of the Example American Count III Products and Services.

83. Each claim of the '785 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. For example, the '785 Patent is related to private virtual dynamic networks and enabling communications between devices on public and private networks. The '785 Patent discloses and claims systems and methods that address technical problems that are inherent in and derive from prior art methods and systems involving the problems of virtual network management, among other issues. The '785 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the '785 Patent are novel and non-obvious and recite elements

and steps that were not routine or conventional at the time of the invention, either individually or in combination.

84. Each claim of the ’785 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’785 Patent.

85. American has known that its infringing products and services, such as the Example American Count III Products and Services, cannot be used without infringing the technology claimed in the ’785 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

86. **Willful Blindness.** American knew of the ’785 Patent, or should have known of the ’785 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’785 Patent not later than receipt of a letter, dated September 30, 2024, and received on the same date. By the time of trial, American will have known and intended (since receiving such notice) that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’785 Patent. *See* Exhibit 7 (Notice Letter).

87. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’785 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or its products and services, such as Example American Count III Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’785 Patent. For example, on information and belief, American offers products and services to its customers and third parties and/or employees that are associated with backend functionality provided by the Example American Count III Products and Services.

American has contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’785 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with backend functionality provided by the Example American Count III Products and Services.

88. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’785 Patent with knowledge of the ’785 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’785 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count III Products and Services to infringe the ’785 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count III Products and Services.

89. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’785 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in infringement of the ’785 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

90. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners', vendors', and/or third-parties' infringement of the '785 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Example American Count III Products and Services for use in a manner that infringes one or more claims of the '785 Patent. Example American Count III Products and Services are especially made or adapted for infringing the '785 Patent and have no substantial non-infringing use.

91. Exhibit 10 (claim chart) includes the Example American Count III Products and Services and Example '785 Patent Claims. As set forth in the chart, the Example American Count III Products and Services practice the technology claimed by the '785 Patent. Accordingly, the Example American Count III Products and Services incorporated in the chart satisfies all elements of the Example '785 Patent Claims.

92. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 10.

93. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant's infringement of the '785 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant's infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

94. Further, Defendant's infringement of Intellectual Ventures' rights under the '785 Patent will continue to damage Intellectual Ventures' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

95. As a result of Defendant's acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT IV

(American's Infringement of U.S. Patent No. 8,027,326)

96. Paragraphs 1 through 95 are incorporated by reference as if fully set forth herein.

97. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '326 Patent, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Accused Products and Services that infringe the '326 Patent, including but not limited to at least the Accused Products and Services identified in the example chart incorporated, per paragraph 96 below, into this Count (collectively, "Example American Count IV Products and Services") that infringe at least the example claims of the '326 Patent identified in the chart incorporated into this Count (the "Example '326 Patent Claims") literally or by the doctrine of equivalents.

98. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '326 Patent Claims, by internal testing and use of the Example American Count IV Products and Services.

99. Each claim of the '326 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. For example, the '326 Patent is related to increasing Wi-Fi bandwidth using a dual-channel for increased flexibility and performance. The '326 Patent discloses and claims systems and methods that address technical problems that are inherent in and derive from prior art methods and systems involving the problems of increasing Wi-Fi bandwidth, among other issues. The '326 Patent addressed this technical problem and others with a technical

solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’326 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

100. Each claim of the ’326 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’326 Patent.

101. American has known that its infringing products and services, such as the Example American Count IV Products and Services, cannot be used without infringing the technology claimed in the ’326 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

102. **Willful Blindness.** American knew of the ’326 Patent, or should have known of the ’326 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’326 Patent not later than receipt of a letter, dated September 30, 2024, and received on the same date. By the time of trial, American will have known and intended (since receiving such notice) that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’326 Patent. *See* Exhibit 7 (Notice Letter).

103. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’326 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or its products and services, such as Example American Count IV Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’326 Patent. For example, on information and belief, American offers

Wi-Fi service through one or more providers such as Intelsat, Viasat, GoGo, and Panasonic,[3] and American uses hardware and/or software from these providers that support Wi-Fi, including IEEE 802.11n and 802.11ac protocols.[4]

104. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’326 Patent with knowledge of the ’326 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’326 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count IV Products and Services to infringe the ’326 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count IV Products and Services.

105. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’326 Patent by its customers, partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in

[3] https://entertainment.aa.com/en/wi-fi-packages. (Last Accessed on 10/9/2024).
[4] *See, e.g.*, https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf (Last Accessed on 10/9/2024); https://fcc.report/FCC-ID/U6YRDAA8190/5344017.pdf (Last Accessed on 10/9/2024); https://cdn.gogoair.com/medialibrary/gogo/media/public/pdfs/brochures/intelsat-brochure-2ku.pdf. (Last Accessed on 10/9/2024).

infringement of the ’326 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

106. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’326 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Example American Count IV Products and Services for use in a manner that infringes one or more claims of the ’326 Patent. Example American Count IV Products and Services are especially made or adapted for infringing the ’326 Patent and have no substantial non-infringing use.

107. Exhibit 11 (claim chart) includes the Example American Count IV Products and Services and Example ’326 Patent Claims. As set forth in the chart, the Example American Count IV Products and Services practice the technology claimed by the ’326 Patent. Accordingly, the Example American Count IV Products and Services incorporated in the chart satisfies all elements of the Example ’326 Patent Claims.

108. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 11.

109. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’326 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

110. Further, Defendant's infringement of Intellectual Ventures' rights under the '326 Patent will continue to damage Intellectual Ventures' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

111. As a result of Defendant's acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT V

(American's Infringement of U.S. Patent No. 7,324,469)

112. Paragraphs 1 through 111 are incorporated by reference as if fully set forth herein.

113. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '469 Patent, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Accused Products and Services that infringe the '469 Patent, including but not limited to at least the Accused Products and Services identified in the example chart incorporated, per paragraph 112 below, into this Count (collectively, "Example American Count V Products and Services") that infringe at least the example claims of the '469 Patent identified in the chart incorporated into this Count (the "Example '469 Patent Claims") literally or by the doctrine of equivalents.

114. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '469 Patent Claims, by internal testing and use of the Example American Count V Products and Services.

115. Each claim of the '469 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. For example, the '469 Patent is related to an improved satellite distributed high-speed Internet Hotspot. The '469 Patent discloses and claims systems and

methods that address technical problems that are inherent in and derive from prior art methods and systems involving the problems of distributed Internet Hotspots, among other issues. The ’469 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’469 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

116. Each claim of the ’469 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’469 Patent.

117. American has known that its infringing products and services, such as the Example American Count V Products and Services, cannot be used without infringing the technology claimed in the ’469 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

118. **Willful Blindness.** American knew of the ’469 Patent, or should have known of the ’469 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’469 Patent not later than receipt of a letter, dated September 30, 2024, and received on the same date. By the time of trial, American will have known and intended (since receiving such notice) that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’469 Patent. *See* Exhibit 7 (Notice Letter).

119. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’469 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or its products and services, such as Example American Count V Products and Services, in an infringing manner as

described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’469 Patent. For example, on information and belief, American offers Wi-Fi service, including satellite-based Wi-Fi, through one or more providers such as Intelsat, Viasat, and GoGo,[5] and American uses hardware and/or software from these providers that support Internet Hotspots using Wi-Fi.[6]

120. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’469 Patent with knowledge of the ’469 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’469 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count V Products and Services to infringe the ’469 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count V Products and Services.

121. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’469 Patent by its customers, partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in

[5] https://entertainment.aa.com/en/wi-fi-packages. (Last Accessed on 10/9/2024).
[6] *See, e.g.*, https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf (Last Accessed on 10/9/2024); https://cdn.gogoair.com/medialibrary/gogo/media/public/pdfs/brochures/intelsat-brochure-2ku.pdf. (Last Accessed on 10/9/2024).

infringement of the ’469 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

122. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’469 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Example American Count V Products and Services for use in a manner that infringes one or more claims of the ’469 Patent. Example American Count V Products and Services are especially made or adapted for infringing the ’469 Patent and have no substantial non-infringing use.

123. Exhibit 12 (claim chart) includes the Example American Count V Products and Services and Example ’469 Patent Claims. As set forth in the chart, the Example American Count V Products and Services practice the technology claimed by the ’469 Patent. Accordingly, the Example American Count V Products and Services incorporated in the chart satisfies all elements of the Example ’469 Patent Claims.

124. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 12.

125. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’469 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

126. Further, Defendant's infringement of Intellectual Ventures' rights under the '469 Patent will continue to damage Intellectual Ventures' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

127. As a result of Defendant's acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT VI

(American's Infringement of U.S. Patent No. 7,257,582)

128. Paragraphs 1 through 127 are incorporated by reference as if fully set forth herein.

129. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '582 Patent, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Accused Products and Services that infringe the '582 Patent, including but not limited to at least the Accused Products and Services identified in the example charts incorporated, per paragraph 128 below, into this Count (collectively, "Example American Count VI Products and Services") that infringe at least the example claims of the '582 Patent identified in the charts incorporated into this Count (the "Example '582 Patent Claims") literally or by the doctrine of equivalents.

130. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '582 Patent Claims, by internal testing and use of the Example American Count VI Products and Services.

131. Each claim of the '582 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. The '582 Patent is related to improving load balancing by parallel processing of partitioned data. The '582 Patent discloses and claims systems and methods that

address technical problems that are inherent in and derive from prior art methods and systems involving the problems of enabling parallel processing involving linear processes, among other issues. The ’582 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’582 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

132. Each claim of the ’582 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’582 Patent.

133. American has known that its infringing products and services, such as the Example American Count VI Products and Services, cannot be used without infringing the technology claimed in the ’582 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

134. **Willful Blindness.** American knew of the ’582 Patent, or should have known of the ’582 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’582 Patent not later than receipt of a letter, dated September 30, 2024, and received on the same date. By the time of trial, American will have known and intended (since receiving such notice) that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’582 Patent. *See* Exhibit 7 (Notice Letter).

135. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’582 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or its products and services, such as Example American Count VI Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or

third parties to infringe the ’582 Patent. For example, on information and belief, American offers products and services to its customers and third parties and/or employees that are associated with backend functionality provided by the Example American Count VI Products and Services. American has contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’582 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with backend functionality provided by the Example American Count VI Products and Services.

136. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’582 Patent with knowledge of the ’582 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’582 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count VI Products and Services to infringe the ’582 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count VI Products and Services.

137. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’582 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in infringement of the

’582 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

138. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’582 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, selling, offering, and/or offering for sale the Example American Count VI Products and Services for use in a manner that infringes one or more claims of the ’582 Patent. Example American Count VI Products and Services are especially made or adapted for infringing the ’582 Patent and have no substantial non-infringing use.

139. Exhibits 13 and 14 (claim charts) includes the Example American Count VI Products and Services and Example ’582 Patent Claims. As set forth in these charts, the Example American Count VI Products and Services practice the technology claimed by the ’582 Patent. Accordingly, the Example American Count VI Products and Services incorporated in these charts satisfy all elements of the Example ’582 Patent Claims.

140. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim charts of Exhibits 13 and 14.

141. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’582 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

142. Further, Defendant's infringement of Intellectual Ventures' rights under the '582 Patent will continue to damage Intellectual Ventures' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

143. As a result of Defendant's acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT VII

(American's Infringement of U.S. Patent No. 7,712,080)

144. Paragraphs 1 through 143 are incorporated by reference as if fully set forth herein.

145. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '080 Patent, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Accused Products and Services that infringe the '080 Patent, including but not limited to at least the Accused Products and Services identified in the example charts incorporated, per paragraph 146 below, into this Count (collectively, "Example American Count VII Products and Services") that infringe at least the example claims of the '080 Patent identified in the charts incorporated into this Count (the "Example '080 Patent Claims") literally or by the doctrine of equivalents.

146. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '080 Patent Claims, by internal testing and use of the Example American Count VII Products and Services.

147. Each claim of the '080 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. The '080 Patent is related to systems and methods for parallel distributed programming over multiple processors and multiple memories including a distributed shared variable. The '080 Patent discloses and claims systems and methods that address technical

problems that are inherent in and derive from prior art methods and systems involving the problems of efficiently programming tasks and threads in a parallel distributed program, among other issues. The ’080 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’080 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

148. Each claim of the ’080 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’080 Patent.

149. American has known that its infringing products and services, such as the Example American Count VII Products and Services, cannot be used without infringing the technology claimed in the ’080 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

150. **Willful Blindness.** American knew of the ’080 Patent, or should have known of the ’080 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’080 Patent. By the time of trial, American will have known and intended that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’080 Patent.

151. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’080 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or cause to use its products and services, such as Example American Count VII Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’080 Patent. For example, on information and belief,

American offers products and services to its customers and third parties and/or employees that are associated with backend functionality provided by the Example American Count VII Products and Services. American has contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’080 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with backend functionality provided by the Example American Count VII Products and Services.

152. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’080 Patent with knowledge of the ’080 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’080 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count VII Products and Services to infringe the ’080 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count VII Products and Services.

153. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’080 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in

infringement of the ’080 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

154. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’080 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Example American Count VII Products and Services for use in a manner that infringes one or more claims of the ’080 Patent. Example American Count VII Products and Services are especially made or adapted for infringing the ’080 Patent and have no substantial non-infringing use.

155. Exhibit 21 (claim chart) includes the Example American Count VII Products and Services and Example ’080 Patent Claims. As set forth in these charts, the Example American Count VII Products and Services practice the technology claimed by the ’080 Patent. Accordingly, the Example American Count VII Products and Services incorporated in these charts satisfy all elements of the Example ’080 Patent Claims.

156. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 21.

157. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’080 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

158. Further, American's infringement of Intellectual Ventures' rights under the '080 Patent will continue to damage Intellectual Ventures' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

159. As a result of Defendant's acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT VIII

(American's Infringement of U.S. Patent No. 7,822,841)

160. Paragraphs 1 through 159 are incorporated by reference as if fully set forth herein.

161. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '841 Patent, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Accused Products and Services that infringe the '841 Patent, including but not limited to at least the Accused Products and Services identified in the example charts incorporated, per paragraph 162 below, into this Count (collectively, "Example American Count VIII Products and Services") that infringe at least the example claims of the '841 Patent identified in the charts incorporated into this Count (the "Example '841 Patent Claims") literally or by the doctrine of equivalents.

162. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '841 Patent Claims, by internal testing and use of the Example American Count VIII Products and Services.

163. Each claim of the '841 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. The '841 Patent is related to secure, customizable computer clusters and detecting cluster-level and node-level issues. The '841 Patent discloses and claims systems and methods that address technical problems that are inherent in and derive from prior art methods

and systems involving the problems of multi-cluster configuration management and efficient usage of cluster resources, among other issues. The ’841 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’841 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

164. Each claim of the ’841 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’841 Patent.

165. American has known that its infringing products and services, such as the Example American Count VIII Products and Services, cannot be used without infringing the technology claimed in the ’841 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

166. **Willful Blindness.** American knew of the ’841 Patent, or should have known of the ’841 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’841 Patent. By the time of trial, American will have known and intended that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’841 Patent.

167. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’841 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or cause to use its products and services, such as Example American Count VIII Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors,

customers, and/or third parties to infringe the ’841 Patent. For example, on information and belief, American offers products and services to its customers and third parties and/or employees that are associated with backend functionality provided by the Example American Count VIII Products and Services. American has contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’841 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with backend functionality provided by the Example American Count VIII Products and Services.

168. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’841 Patent with knowledge of the ’841 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’841 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count VIII Products and Services to infringe the ’841 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count VIII Products and Services.

169. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’841 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in

infringement of the ’841 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

170. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’841 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Example American Count VIII Products and Services for use in a manner that infringes one or more claims of the ’841 Patent. Example American Count VIII Products and Services are especially made or adapted for infringing the ’841 Patent and have no substantial non-infringing use.

171. Exhibit 22 (claim chart) includes the Example American Count VIII Products and Services and Example ’841 Patent Claims. As set forth in these charts, the Example American Count VIII Products and Services practice the technology claimed by the ’841 Patent. Accordingly, the Example American Count VIII Products and Services incorporated in these charts satisfy all elements of the Example ’841 Patent Claims.

172. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 22.

173. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’841 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

174. Further, American's infringement of Intellectual Ventures' rights under the '841 Patent will continue to damage Intellectual Ventures' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

175. As a result of Defendant's acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT IX

(American's Infringement of U.S. Patent No. 8,352,584)

176. Paragraphs 1 through 175 are incorporated by reference as if fully set forth herein.

177. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '584 Patent, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Accused Products and Services that infringe the '584 Patent, including but not limited to at least the Accused Products and Services identified in the example charts incorporated, per paragraph 178 below, into this Count (collectively, "Example American Count IX Products and Services") that infringe at least the example claims of the '584 Patent identified in the charts incorporated into this Count (the "Example '584 Patent Claims") literally or by the doctrine of equivalents.

178. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '584 Patent Claims, by internal testing and use of the Example American Count IX Products and Services.

179. Each claim of the '584 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. The '584 Patent is related to secure, customizable computer clusters and detecting cluster-level and node-level issues. The '584 Patent discloses and claims systems and methods that address technical problems that are inherent in and derive from prior art methods

and systems involving the problems of multi-cluster configuration management and efficient usage of cluster resources, among other issues. The ’584 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’584 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

180. Each claim of the ’584 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’584 Patent.

181. American has known that its infringing products and services, such as the Example American Count IX Products and Services, cannot be used without infringing the technology claimed in the ’584 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

182. **Willful Blindness.** American knew of the ’584 Patent, or should have known of the ’584 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’584 Patent. By the time of trial, American will have known and intended that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’584 Patent.

183. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’584 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or cause to use its products and services, such as Example American Count IX Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’584 Patent. For example, on information and belief, American

offers products and services to its customers and third parties and/or employees that are associated with backend functionality provided by the Example American Count IX Products and Services. American has contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’584 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with backend functionality provided by the Example American Count IX Products and Services.

184. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’584 Patent with knowledge of the ’584 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’584 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count IX Products and Services to infringe the ’584 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count IX Products and Services.

185. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’584 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in

infringement of the ’584 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

186. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’584 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Example American Count IX Products and Services for use in a manner that infringes one or more claims of the ’584 Patent. Example American Count IX Products and Services are especially made or adapted for infringing the ’584 Patent and have no substantial non-infringing use.

187. Exhibit 23 (claim chart) includes the Example American Count IX Products and Services and Example ’584 Patent Claims. As set forth in these charts, the Example American Count IX Products and Services practice the technology claimed by the ’584 Patent. Accordingly, the Example American Count IX Products and Services incorporated in these charts satisfy all elements of the Example ’584 Patent Claims.

188. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 23.

189. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’584 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

190. Further, American's infringement of Intellectual Ventures' rights under the '584 Patent will continue to damage Intellectual Ventures' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

191. As a result of Defendant's acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT X

(American's Infringement of U.S. Patent No. 11,032,000)

192. Paragraphs 1 through 191 are incorporated by reference as if fully set forth herein.

193. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '000 Patent, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Accused Products and Services that infringe the '000 Patent, including but not limited to at least the Accused Products and Services identified in the example charts incorporated, per paragraph 194 below, into this Count (collectively, "Example American Count X Products and Services") that infringe at least the example claims of the '000 Patent identified in the charts incorporated into this Count (the "Example '000 Patent Claims") literally or by the doctrine of equivalents.

194. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '000 Patent Claims, by internal testing and use of the Example American Count X Products and Services.

195. Each claim of the '000 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. The '000 Patent is related to improving user equipment (UE) devices by improving UE uplink channel control. The '000 Patent discloses and claims systems and methods that address technical problems that are inherent in and derive from prior art methods

and systems involving the problems of lack of correlation between uplink and downlink path loss, among other issues. The ’000 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’000 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

196. Each claim of the ’000 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’000 Patent.

197. American has known that its infringing products and services, such as the Example American Count X Products and Services, cannot be used without infringing the technology claimed in the ’000 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

198. **Willful Blindness.** American knew of the ’000 Patent, or should have known of the ’000 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’000 Patent. By the time of trial, American will have known and intended that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’000 Patent.

199. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’000 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or cause to use its products and services, such as Example American Count X Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’000 Patent. For example, on information and belief, American offers products and services to its customers and third parties that are associated with wireless

functionality provided by the Example American Count X Products and Services. American has contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’000 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with wireless functionality provided by the Example American Count X Products and Services.

200. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’000 Patent with knowledge of the ’000 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’000 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count X Products and Services to infringe the ’000 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count X Products and Services.

201. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’000 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in infringement of the ’000 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

202. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners', vendors', and/or third-parties' infringement of the '000 Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Example American Count X Products and Services for use in a manner that infringes one or more claims of the '000 Patent. Example American Count X Products and Services are especially made or adapted for infringing the '000 Patent and have no substantial non-infringing use.

203. Exhibit 24 (claim chart) includes the Example American Count X Products and Services and Example '000 Patent Claims. As set forth in these charts, the Example American Count X Products and Services practice the technology claimed by the '000 Patent. Accordingly, the Example American Count X Products and Services incorporated in these charts satisfy all elements of the Example '000 Patent Claims.

204. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 24.

205. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant's infringement of the '000 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant's infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

206. Further, American's infringement of Intellectual Ventures' rights under the '000 Patent will continue to damage Intellectual Ventures' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

207. As a result of Defendant's acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT XI

(American's Infringement of U.S. Patent No. 10,103,845)

208. Paragraphs 1 through 207 are incorporated by reference as if fully set forth herein.

209. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '845 Patent, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Accused Products and Services that infringe the '845 Patent, including but not limited to at least the Accused Products and Services identified in the example charts incorporated, per paragraph 210 below, into this Count (collectively, "Example American Count XI Products and Services") that infringe at least the example claims of the '845 Patent identified in the charts incorporated into this Count (the "Example '845 Patent Claims") literally or by the doctrine of equivalents.

210. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '845 Patent Claims, by internal testing and use of the Example American Count XI Products and Services.

211. Each claim of the '845 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. The '845 Patent is related to systems and methods for dual mode communications including spatial multiplexing and expanded bandwidth signaling to data. The '845 Patent discloses and claims systems and methods that address technical problems that are inherent in and derive from prior art methods and systems involving the problems of improving bandwidth and expanded signaling in MIMO (multiple-input-multiple output) spatial multiplexing systems, among other issues. The '845 Patent addressed this technical problem and others with a

technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the ’845 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

212. Each claim of the ’845 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’845 Patent.

213. American has known that its infringing products and services, such as the Example American Count XI Products and Services, cannot be used without infringing the technology claimed in the ’845 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

214. **Willful Blindness.** American knew of the ’845 Patent, or should have known of the ’845 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’845 Patent. By the time of trial, American will have known and intended that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’845 Patent.

215. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’845 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or cause to use its products and services, such as Example American Count XI Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’845 Patent. For example, on information and belief, American offers products and services to its customers and third parties that are associated with wireless functionality provided by the Example American Count XI Products and Services. American has

contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’845 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with wireless functionality provided by the Example American Count XI Products and Services.

216. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’845 Patent with knowledge of the ’845 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’845 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count XI Products and Services to infringe the ’845 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count XI Products and Services.

217. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’845 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in infringement of the ’845 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

218. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’845

Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Example American Count XI Products and Services for use in a manner that infringes one or more claims of the ’845 Patent. Example American Count XI Products and Services are especially made or adapted for infringing the ’845 Patent and have no substantial non-infringing use.

219. Exhibit 25 (claim chart) includes the Example American Count XI Products and Services and Example ’845 Patent Claims. As set forth in these charts, the Example American Count XI Products and Services practice the technology claimed by the ’845 Patent. Accordingly, the Example American Count XI Products and Services incorporated in these charts satisfy all elements of the Example ’845 Patent Claims.

220. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 25.

221. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’845 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

222. Further, American’s infringement of Intellectual Ventures’ rights under the ’845 Patent will continue to damage Intellectual Ventures’ business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

223. As a result of Defendant’s acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

COUNT XII

(American's Infringement of U.S. Patent No. 7,721,282)

224. Paragraphs 1 through 223 are incorporated by reference as if fully set forth herein.

225. **Direct Infringement**. American, without authorization or license from IV, has directly infringed, and continues to directly infringe, literally and/or by the doctrine of equivalents, individually and/or jointly, the '282 Patent, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Accused Products and Services that infringe the '282 Patent, including but not limited to at least the Accused Products and Services identified in the example charts incorporated, per paragraph 226 below, into this Count (collectively, "Example American Count XII Products and Services") that infringe at least the example claims of the '282 Patent identified in the charts incorporated into this Count (the "Example '282 Patent Claims") literally or by the doctrine of equivalents.

226. On information and belief, American has also infringed and continues to directly infringe, literally or under the doctrine of equivalents, the Example '282 Patent Claims, by internal testing and use of the Example American Count XII Products and Services.

227. Each claim of the '282 Patent is valid, enforceable, and patent eligible under Section 101 of the Patent Act. The '282 Patent is related to distributing an application environment to a compute node involving root nodes and leaf nodes in a clustered computer system. The '282 Patent discloses and claims systems and methods that address technical problems that are inherent in and derive from prior art methods and systems involving the problems of improving boot or bring-up time in clustered computing systems and reducing wasted disk space, among other issues. The '282 Patent addressed this technical problem and others with a technical solution that is described in the specification and captured by one or more claims. Additionally, the claims of the

’282 Patent are novel and non-obvious and recite elements and steps that were not routine or conventional at the time of the invention, either individually or in combination.

228. Each claim of the ’282 Patent recites an independent invention. Neither the example claims described nor any other individual claim is representative of all claims in the ’282 Patent.

229. American has known that its infringing products and services, such as the Example American Count XII Products and Services, cannot be used without infringing the technology claimed in the ’282 Patent, and are not staple articles of commerce suitable for substantial non-infringing uses.

230. **Willful Blindness.** American knew of the ’282 Patent, or should have known of the ’282 Patent, but was willfully blind to its existence. American has had actual knowledge of the ’282 Patent. By the time of trial, American will have known and intended that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the ’282 Patent.

231. **Induced Infringement.** American has also contributed to and/or induced, and continues to contribute to and/or induce the infringement of the ’282 Patent by contributing to and/or inducing its partners, vendors, customers, and/or third parties to use or cause to use its products and services, such as Example American Count XII Products and Services, in an infringing manner as described above, including encouraging and instructing its partners, vendors, customers, and/or third parties to infringe the ’282 Patent. For example, on information and belief, American offers products and services to its customers and third parties and/or employees that are associated with backend functionality provided by the Example American Count XII Products and Services. American has contributed to and/or induced, and continues to contribute to and/or induce

the infringement of the ’282 Patent by offering such products and services and contributing to and/or inducing its customers and third parties and/or employees to use such products and services that are associated with backend functionality provided by the Example American Count XII Products and Services.

232. American therefore actively, knowingly, and intentionally has committed, and continues to commit, affirmative acts that cause infringement, literally and/or by the doctrine of equivalents, of one or more claims of the ’282 Patent with knowledge of the ’282 Patent and knowledge that the induced acts constitute infringement of one or more claims of the ’282 Patent. American has actively induced others, including, but not limited to, partners, vendors, customers, and/or third parties who use the Example American Count XII Products and Services to infringe the ’282 Patent, literally and/or by the doctrine of equivalents, throughout the United States, including within this District, by, among other things, advertising, promoting, and instructing the infringing use of the Example American Count XII Products and Services.

233. **Contributory Infringement.** American actively, knowingly, and intentionally has committed, and continues to commit contributory infringement, literally and/or by the doctrine of equivalents, by, *inter alia*, knowingly providing software and technologies that when used, cause the direct infringement of one or more claims of the ’282 Patent by its partners, vendors, customers, and/or third parties, and which have no substantial non-infringing uses, or include a separate and distinct technology that is especially made or especially adapted for use in infringement of the ’282 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

234. American therefore actively, knowingly, and intentionally has been and continues to materially contribute to their partners’, vendors’, and/or third-parties’ infringement of the ’282

Patent, literally and/or by the doctrine of equivalents, by making, utilizing, servicing, testing, distributing, offering, and/or offering for sale the Example American Count XII Products and Services for use in a manner that infringes one or more claims of the ’282 Patent. Example American Count XII Products and Services are especially made or adapted for infringing the ’282 Patent and have no substantial non-infringing use.

235. Exhibit 26 (claim chart) includes the Example American Count XII Products and Services and Example ’282 Patent Claims. As set forth in these charts, the Example American Count XII Products and Services practice the technology claimed by the ’282 Patent. Accordingly, the Example American Count XII Products and Services incorporated in these charts satisfy all elements of the Example ’282 Patent Claims.

236. Intellectual Ventures therefore incorporates by reference in its allegations herein the claim chart of Exhibit 26.

237. Intellectual Ventures is entitled to recover damages adequate to compensate for Defendant’s infringement of the ’282 Patent and will continue to be damaged by such infringement. Intellectual Ventures is entitled to recover damages from Defendant to compensate them for Defendant’s infringement, as alleged above, in an amount measured by no less than a reasonable royalty under 35 U.S.C. § 284, as well as enhanced damages pursuant to 35 U.S.C. § 284.

238. Further, American’s infringement of Intellectual Ventures’ rights under the ’282 Patent will continue to damage Intellectual Ventures’ business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court.

239. As a result of Defendant’s acts of infringement, Plaintiffs have suffered and will continue to suffer damages in an amount to be proven at trial.

DEMAND FOR JURY TRIAL

240. Under Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs respectfully request a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request the following relief:

A. A judgment that the Patents-in-Suit are valid and enforceable;

B. A judgment that Defendant directly infringes, contributorily infringes, and/or actively induces infringement of one or more claims of *each of* the Patents-in-Suit;

C. A judgment that awards Plaintiffs all damages adequate to compensate them for Defendant's direct infringement, willful infringement, contributory infringement, and/or induced infringement, of the Patents-in-Suit, including all pre- judgment and post- judgment interest at the maximum rate permitted by law;

D. A judgment that awards Plaintiffs all appropriate damages under 35 U.S.C. § 284 for Defendant's past infringement with respect to the Patents-in-Suit;

E. A judgment that awards Plaintiffs all appropriate damages under 35 U.S.C. § 284 for Defendant's infringement of the '844 Patent, '722 Patent, '785 Patent, '326 Patent, '469 Patent, '582 Patent, '080 Patent, '282 Patent, '841 Patent, '584 Patent, '000 Patent, and '845 Patent, which continue to damage Plaintiffs' business, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by the Court;

F. A judgment that awards Plaintiffs all appropriate damages under 35 U.S.C. § 284 for Defendant's continuing or future infringement, up until the date such judgment

is entered with respect to the Patents-in-Suit, including ongoing royalties, pre- and post-judgment interest, costs, and disbursements as justified under 35 U.S.C. § 284;

G. A judgment that this case is exceptional under 35 U.S.C. § 285;

H. An accounting of all damages not presented at trial; and

I. A judgment that awards Plaintiffs their costs, disbursements, attorneys' fees, and such further and additional relief as is deemed appropriate by the Court.

Dated: September 10, 2025

Respectfully submitted,

By: */s/ Jonathan K. Waldrop*

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing instrument was served or delivered electronically, via email, to all counsel of record on this 10th day of September, 2025.

/s/ Jonathan K. Waldrop
Jonathan K. Waldrop