

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

TRACKTHINGS LLC,

Plaintiff,

v.

AMAZON.COM, INC., AMAZON.COM
SERVICES LLC, and EERO LLC,

Defendants.

Civil Action No. 6:21-cv-00720-ADA

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

TrackThings LLC (“TrackThings”) hereby asserts claims against Amazon.com, Inc., Amazon.com Services LLC, and eero LLC (collectively, “Defendants”) for infringement of U.S. Patent Nos. 9,642,017 (“the ’017 patent”), 9,332,442 (“the ’442 patent”), and 10,107,893 (“the ’893 patent”; collectively “the Patents-in-Suit”). In support thereof, TrackThings alleges as follows:

I. THE PARTIES

1. Plaintiff TrackThings is a New Jersey limited liability company with its principal place of business at 62 Burlington Road, Murray Hill, New Jersey 07974. TrackThings is the owner of the Patents-in-Suit, including the right to sue for past infringement.

2. Defendant Amazon.com, Inc. (“Amazon”) is a Delaware corporation with its principal place of business at 410 Terry Ave. North, Seattle, Washington 98109-5210. Amazon may be served with process at least via its listed registered agent, Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808.

3. Defendant Amazon.com Services LLC (“Amazon Services”) is a Delaware corporation, with its principal place of business at 410 Terry Ave. North, Seattle, Washington 98109-5210. Amazon Services may be served with process via its listed registered agent, Corporation Service Company, 251 Little Falls Dr., Wilmington, Delaware 19808. Amazon Services is registered to do business in the State of Texas, and it may also be served with process via its registered agent in Texas, Corporation Service Company dba CSC-Lawyers Incorporating Service Company at 211 7th Street, Suite 620, Austin, TX 78701-3218. Amazon Services is a wholly owned subsidiary of Amazon.

4. Defendant eero LLC (“eero”) is a Delaware corporation with its principal place of business at 660 3rd Street, 4th Floor, San Francisco, CA 94107. eero may be served with process at least via its listed registered agent, Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808. eero is a wholly owned subsidiary of Amazon.

II. JURISDICTION AND VENUE

5. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. §§ 271 and 281, *et seq.*

6. Subject matter jurisdiction is proper pursuant to 28 U.S.C. §§ 1331 and 1338.

7. This Court has personal jurisdiction over Defendants in this action. Defendants have committed acts within this District giving rise to this action, and have established minimum contacts with this forum such that the exercise of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice.

8. In particular, Defendants directly and/or through subsidiaries or intermediaries (including distributors, retailers, and others), have committed and continue to commit acts of infringement in this District by, among other things, making, using, importing, offering to sell and selling products and/or services that infringe the Patents-in-Suit, as described herein. Defendants

are directly and/or through intermediaries making, using, selling, offering for sale, importing, distributing, advertising, promoting, and otherwise commercializing infringing products in this District. Defendants regularly conduct and solicit business in, engage in other persistent courses of conduct in, and/or derive substantial revenue from goods and services provided to the residents of this District and the State of Texas.

9. Defendants are subject to jurisdiction pursuant to due process and/or the Texas Long Arm Statute due to their substantial business in this State and District including at least Defendants' infringing activities, regularly doing or soliciting business at their Austin facilities, and engaging in persistent conduct and deriving substantial revenues from goods and services provided to residents in the State of Texas. Additionally, on information and belief, Amazon is receiving millions of dollars in tax breaks from McLennan County and the city of Waco for a fulfillment center currently being built in Waco for the purpose of doing and soliciting business in this District. (*See, e.g.*, https://wacotrib.com/news/local/amazon-gets-9-5m-from-waco-county-in-tax-breaks-over-20-years/article_730bc48e-7094-11eb-bcd1-eb93141c16b0.html) (accessed July 7, 2021).

10. For example, Defendants distribute, sell, and deliver the Accused Products (defined below) to consumers in this District. A customer seeking to purchase an Accused Product can do so from the eero website, eero.com, or the Amazon website, Amazon.com. On the Amazon.com website, the Accused Products are identified as shipped from and sold by "Amazon.com Services LLC". (*See, e.g.*, https://www.amazon.com/Amazon-eero-6-3-pack/dp/B085WSCTS4/ref=sr_1_1?dchild=1&keywords=eero&qid=1625246398&sr=8-1) (accessed July 7, 2021).

11. By working in concert to store, distribute, sell, and deliver their products to Texas residents, including those of this District, Defendants purposefully place the Accused Products in established distribution channels in the stream of commerce.

12. Further, as described below, Defendants have a regular and established place of business in this District, have thousands of employees, including over a dozen eero employees that are located in or around Austin, Texas, have over 30 employees located in or around Waco, Texas (even prior to the completion of their planned Waco fulfillment center), and have job postings—both on the Amazon website and on the eero website—located within this District.

13. Defendants, therefore, have purposefully directed their activities at this State and this District, and should reasonably anticipate being brought in this Court.

14. Venue is proper in this District under 28 U.S.C. §§ 1391(b) and (c), and 28 U.S.C. § 1400(b) because Defendants have established places of business in this District, have committed acts of patent infringement giving rise to this action in this District, and continue to conduct business in this District, including one or more acts of making, selling, using, importing and/or offering for sale infringing products or providing support service to their customers in this District.

15. On information and belief, Defendants have regular and established places of business, and employ thousands of people, in this District. For example, Defendants have a regular and established place of business at 11501 Altera Parkway, Austin, TX 78758, herein its “Tech Hub.” In other pleadings, Amazon has admitted that its Tech Hub is a regular and established place of business in this District. This office is also a regular and established place of business of eero. As described below, eero additionally has over a dozen employees located near its Tech Hub and regularly posts listings for jobs here. As a further example, Defendants have fulfillment facilities in this District, e.g., at 2093 Rutland Dr., Austin, TX 78758. These fulfillment facilities are not

only regular and established places of business for Amazon and Amazon Services, they are also regular and established places of business for eero at least because eero works in concert with Amazon and Amazon Services to store an inventory of eero products at these facilities, to prepare eero products for shipment at these facilities, and to deliver eero products to consumers from these facilities.

16. Further, on information and belief, Defendants post openings for jobs in this District (e.g., in Waco and Austin, Texas). (*See, e.g.,* Waco, TX jobs listed at https://www.amazon.jobs/en/search?base_query=&loc_query=Waco%2C+TX%2C+United+States&city=Waco&county=McLennan®ion=Texas&country=USA&latitude=31.57182&longitude=-97.14951&radius=24km) (*See, e.g.,* Austin, TX jobs listed at https://www.amazon.jobs/en/search?base_query=&loc_query=Austin%2C+TX%2C+United+States&latitude=30.26759&longitude=-97.74299&loc_group_id=&invalid_location=false&country=USA&city=Austin®ion=Texas&county=Travis, <https://boards.greenhouse.io/eero/>, last accessed July 7, 2021).

17. Additionally, on information and belief, over a dozen LinkedIn members identify themselves as eero employees in the Austin, Texas Metropolitan Area. (*See, e.g.,* https://www.linkedin.com/search/results/people/?currentCompany=%5B%224801672%22%5D&geoUrn=%5B%2290000064%22%5D&origin=FACETED_SEARCH, which on July 7, 2021 listed 15 eero employees in the Austin, Texas Metropolitan Area) (to access hyperlink, copy web address directly into browser).

18. Additionally, on information and belief, over 30 LinkedIn members identify themselves as Amazon employees in the Waco, Texas Metropolitan Area. (*See, e.g.,* <https://www.linkedin.com/search/results/people/?currentCompany=%5B%221586%22%5D&ge>

[oUrn=%5B%22103659815%22%5D&origin=FACETED_SEARCH](https://www.linkedin.com/search/results/people/?currentCompany=%5B%22103659815%22%5D&origin=FACETED_SEARCH), which on July 7, 2021 listed 35 Amazon employees in the Waco, Texas Area) (to access hyperlink, copy web address directly into browser). Further, on information and belief, over 3,000 LinkedIn members identify themselves as Amazon employees in the Austin, Texas Metropolitan Area. (See, e.g., <https://www.linkedin.com/search/results/people/?currentCompany=%5B%221586%22%5D&ge> [oUrn=%5B%2290000064%22%5D&origin=FACETED_SEARCH](https://www.linkedin.com/search/results/people/?currentCompany=%5B%2290000064%22%5D&origin=FACETED_SEARCH), which on July 7, 2021 listed 3,100 Amazon employees in the Austin, Texas Metropolitan Area) (to access hyperlink, copy web address directly into browser).

19. Additionally, on information and belief, an Amazon fulfillment center in Waco is currently under construction. (See, e.g., https://wacotrib.com/news/local/amazon-gets-9-5m-from-waco-county-in-tax-breaks-over-20-years/article_730bc48e-7094-11eb-bcd1-eb93141c16b0.html). This Waco fulfillment center is anticipated to open in 2021 and to employ over 1,000 people in this District. (See, e.g., <https://rejournal.com/amazon-to-build-robotic-fulfillment-center-in-waco-tx/>).

III. PATENTS IN SUIT

20. The '017 patent, entitled "APPARATUS AND METHOD FOR IMPROVING THE INTEGRITY AND PERFORMANCE OF AN AD-HOC WIRELESS NETWORK," was lawfully issued by the United States Patent and Trademark Office on May 2, 2017. A true and correct copy of the '017 patent is attached as **Exhibit A**.

21. The '017 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

22. TrackThings is the owner, by assignment, of the '017 patent, including the right to sue for past infringement.

23. The '442 patent, entitled "APPARATUS AND METHOD OF A CONFIGURABLE NETWORK," was lawfully issued by the United States Patent and Trademark Office on May 3, 2016. A true and correct copy of the '442 patent is attached as **Exhibit B**.

24. The '442 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

25. TrackThings is the owner, by assignment, of the '442 patent, including the right to sue for past infringement.

26. The '893 patent, entitled "APPARATUS AND METHOD TO AUTOMATICALLY SET A MASTER-SLAVE MONITORING SYSTEM," was lawfully issued by the United States Patent and Trademark Office on October 23, 2018. A true and correct copy of the '893 patent is attached as **Exhibit C**.

27. The '893 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

28. TrackThings is the owner, by assignment, of the '893 patent, including the right to sue for past infringement.

IV. FACTUAL ALLEGATIONS

Introduction

29. Thaddeus Gabara is the sole inventor of all three Patents-in-Suit. Mr. Gabara is a life-long engineer and innovator, and is listed as an inventor on over 120 patents. After a multi-decade career at AT&T Bell Laboratories and Bell Labs Research, Mr. Gabara founded TrackThings as a technology incubator to continue to innovate as an entrepreneur in various technical fields including networking, audio and signal processing, mobile, and wireless technology.

30. TrackThings owns over a dozen of Mr. Gabara's patents, and has been involved in partnering and licensing activities to promote the commercialization and use of these inventions. TrackThings overtly publishes and discloses its patents and their relevant technology, including but not limited to the Patents-in-Suit, on, e.g., its website located at www.trackthings.tech. To the extent necessary, TrackThings has complied with all requirements of 35 U.S.C. § 287 at all relevant times for each of the Patents-in-Suit.

31. The three Patents-in-Suit are related to wireless networking technology that allows devices (such as computers, smartphones, televisions, printers, etc.) in environments such as homes or small offices¹ to wirelessly communicate with each other and to wirelessly access the internet. In particular, the patented inventions are used in, and are critically important to, wireless systems called "mesh WiFi" systems, including mesh WiFi systems manufactured and sold by Defendants.

32. In a traditional home networking system without a mesh WiFi system, a wireless router typically provides internet access for all of the devices within the home. One issue with this arrangement is that a traditional router has limited reach or coverage and may leave "dead zones" within a home. Although these routers could be combined with "range extenders," these range extenders cause bandwidth issues and other complications for users. For example, range extenders function as a distinct network, use at least half of the available data bandwidth to communicate back to the original WiFi network, and require a user to disconnect from one network and switch to the other when moving throughout a home.

¹ Although this Complaint references use of the patented technology in homes or references "home networking systems," such language is not intended to be limiting. The technology claimed in the Patents-in-Suit can be used in various environments such as homes, offices, and other venues.

33. Mesh WiFi systems rely on multiple wireless nodes, connected to each other, to form an integrated WiFi network often distributed throughout a home or a small office. Typically, one node is an edge router connected to the internet, and the other nodes are spread out throughout the network. The edge router and other nodes work together to form a single, integrated network.

34. Mesh WiFi systems improve upon traditional systems to greatly increase the overall reach of a single, integrated network. As compared to a traditional wireless router, mesh technology enables more efficient WiFi systems with extended coverage to better reach all areas of a home. For these reasons, mesh WiFi is significantly superior to range extenders and has emerged as the preferred solution for whole-home connectivity.

35. Mr. Gabara's inventions disclosed and claimed in the Patents-in-Suit cover three fundamental pillars for commercially successful mesh WiFi systems.

36. The '017 patent generally relates to methods and systems for optimally placing and connecting new nodes into a wireless network using a distributed computational unit that measures link integrity within the network. The claims of the '017 patent cover specific improvements in mesh networking technology that go beyond what is well-understood, routine, and conventional in the field of art.

37. The '442 patent generally relates to using multiple, differentiated radios to manage network communications and connected devices simultaneously. The claims of the '442 patent cover specific improvements in mesh networking technology that go beyond what is well-understood, routine, and conventional in the field of art.

38. The '893 patent generally relates to dynamically reconfiguring and rerouting networks using bidirectional links to improve performance. The claims of the '893 patent cover

specific improvements in mesh networking technology that go beyond what is well-understood, routine, and conventional in the field of art.

39. As described in more detail below, the Defendants' mesh WiFi systems infringe all three Patents-in-Suit.

The Accused Products and Defendants' Infringement

40. Defendants have developed, manufactured, used, sold, and/or offered for sale in the United States, and/or imported into the United States, and continue to develop, manufacture, use, sell, and/or offer for sale in the United States, and/or import into the United States, at least the following products: eero (1st Generation) (Model Number A010001), eero Pro (2nd Generation) (Model Number B010001), eero Beacon (Model Number D010001), eero (2nd Generation) (J010011), eero pro 6 (Model Number K010011), eero 6 (Model Number N010011), eero 6 extender (Model Number Q010011), eero 6+ (Model Number AX30000), Ring Alarm Pro Base Station (Model Number 5A3T3), eero Pro 6E (Model Number S010001), and all combinations or bundles of the foregoing (collectively referred to as the "Accused Products"). On the Amazon website, the Accused Products are typically marketed as "Amazon eero" products in line with the following exemplary syntax: "Amazon eero 6 ...". (See, e.g., https://www.amazon.com/Amazon-eero-6-3-pack/dp/B085WSCTS4/ref=sr_1_1?dchild=1&keywords=amazon+eero&qid=1625376790&sr=8-1) (accessed August 3, 2022).

41. Upon information and belief, Defendants have supplied and continue to supply the Accused Products, and/or components thereof, outside the United States, including to Canada, Australia, France, Germany, Italy, Spain, and the United Kingdom.

42. Defendants sell, offer for sale, and operate multiple products and services for use with the Accused Products, including but not limited to products such as smartphones, tablets,

smart home devices including Amazon Echo & Alexa products, Ring products, the eero home wifi system app (“eero App”), eero Insight, and eero Secure / eero Secure+ (collectively referred to as the “Additional Products”). The sales revenue from the Additional Products and other such products and services is driven by and dependent on the use and sale of the Accused Products.

43. Defendants have made, used, sold, offered to sell and/or imported infringing products, including the Accused Products, in the United States, and continue to do so.

44. By doing so, Defendants have directly infringed, and continue to directly infringe, the Patents-in-Suit.

45. Defendants have engaged and continue to engage in a pattern of conduct intended to induce and contribute to the infringement of others, such as their customers and users.

46. Through their actions, Defendants induce and contribute to the infringement of the Patents-in-Suit, and thus indirectly infringe the Patents-in-Suit.

47. There is an actual, substantial, and continuing justiciable controversy between TrackThings and Defendants regarding Defendants’ infringement of the Patents-in-Suit. Absent a judgment and injunction from this Court, Defendants will continue to infringe the Patents-in-Suit and continue to cause damage and irreparable harm to TrackThings.

48. Despite being aware of or having knowledge of the Patents-in-Suit and the value and benefits of TrackThings’ patented technology, including by way of TrackThings’ overt publication of the Patents-in-Suit and their potential uses and by way of TrackThings’ filing of a lawsuit against Netgear, Inc.—a direct competitor of Defendants—in the United States District Court of the Southern District of New York in Civil Action No. 1:21-cv-05440² for infringing the Patents-in-Suit by selling and otherwise providing products that compete with and are similar to

² On July 20, 2022 this case was transferred to the United States District Court of the District of Delaware in Civil Action No. DDE-1:22-cv-00981.

the Accused Products, and in any event through the filing of the Complaint for Patent Infringement (D.I. 1) on July 13, 2021 (“Original Complaint”) or the serving of the Original Complaint on July 15, 2021 or shortly thereafter, Defendants engaged, and continue to engage, in behavior that they knew or should have known had a high likelihood of infringing the Patents-in-Suit, including by using TrackThings’ patented technology in the Accused Products.

49. For example, since TrackThings filed its Original Complaint on July 13, 2021, which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing in that Original Complaint.

50. Defendants’ infringement is willful. Defendants continue to commit acts of infringement despite a high likelihood that their actions constitute infringement, and Defendants knew or should have known that their actions constituted an unjustifiably high risk of infringement.

51. Defendants’ acts of infringement have been willful as of the date they became aware of the patented technology/invention(s) and/or the Patents-in-Suit, and in any event no later than the filing of the Original Complaint for patent infringement and/or the date the Original Complaint for patent infringement was served on Defendants.

V. COUNT ONE – (Infringement of U.S. Patent No. 9,642,017)

52. TrackThings realleges and incorporates by reference each of the preceding paragraphs, as if fully set forth herein.

53. Defendants have and continue to directly and/or indirectly infringe one or more claims, including Claims 1 and 3-8, of the ’017 patent in this District and elsewhere in Texas and the United States at least for the reasons explained in TrackThings’ final infringement contentions (“Infringement Contentions”) incorporated herein by reference.

54. Claim 1 of the ’017 patent, for example, covers:

An ad-hoc wireless network comprising:

at least one client;

a plurality of relays each in a known location; and

a computational unit distributed within the ad-hoc network measuring a link integrity of each link in the ad-hoc wireless network; whereby

the computational unit determines a placement of a new relay at a new location into the ad-hoc wireless network to improve the link integrity of the ad-hoc wireless network.

55. The Accused Products include an ad-hoc wireless network that connect hardware and software clients to the internet and that require a smartphone or computer connected to the network with the eero App.

56. The ad-hoc wireless networks of the Accused Products have relays each at a known location. For example, the Accused Products include eero mesh edge routers and eero mesh extenders with known locations.

57. The Accused Products maintain a physical location name (e.g., “living room,” “basement,” “office,” etc.) and a network location (e.g., connections to other relays) for each relay in the network.

58. The Accused Products have a computational unit distributed within the ad-hoc network that measures a link integrity of each link in the network. For example, the Accused Products have distributed components within their network—including the eero App for network setup and management—which record access point locations, determine link connectivity, toggle daisy-chain and star topologies, and direct the addition of new access points as discussed below, among other functions.

59. The computational unit of the Accused Products measures and displays the strength of connection between relays. For example, the eero App uses both color coding and signal

strength bars to show the strength of network connections within the ad hoc wireless network. Additionally, the computational unit of the Accused Products determines a placement of a new relay at a new location into the ad-hoc wireless network to improve the link integrity of the ad-hoc wireless network. For example, the eero App gives users recommendations for the placement of new eero mesh extenders (e.g., based on the size of a home), detects the addition of new relays, tests users' placement of the new relay, and instructs users to adjust their placement of an eero based on the results of the placement test. (See <https://youtube/2RLon4g2imI?t=147>) (accessed August 3, 2022); (See <https://support.eero.com/hc/en-us/articles/115005497123-How-much-distance-should-there-be-between-eeros->) (accessed August 3, 2022).

60. The Accused Products, alone and/or in conjunction with Additional Products, directly infringe the '017 patent by using the technology for determining the placement of eero mesh extenders in a mesh network.

61. For at least these reasons, Defendants, directly and/or through subsidiaries, agents, and/or business partners, have directly infringed, literally or under the doctrine of equivalents, claims of the '017 patent pursuant to 35 U.S.C. § 271(a) by making, having made, using, selling, offering for sale, and/or importing systems and methods protected thereby including the Accused Products, within the United States and within this district.

62. Defendants also directly infringe the claims of the '017 patent pursuant to 35 U.S.C. § 271(a) to the extent that Defendants demonstrate use of the system for others in advertising, promotion or otherwise.

63. Defendants also infringe the asserted claims of the '017 patent by directing and controlling the actions of its users because they put the invention into service, i.e., control the

system as a whole and obtain benefit from it such that Defendants are liable for direct infringement under 35 U.S.C. § 271(a).

64. The benefits of the Accused Products are conditioned on the performance of certain steps identified by Defendants, and users operate the Accused Products under the instructions and directions prescribed by Defendants. For example, in order to obtain the benefits of the Accused Products, (e.g. seamless whole-home WiFi coverage), Defendants require users to install, use and maintain the Accused Products in a manner Defendants prescribe, including the requirement that users install the eero App to use and operate the Accused Products. Defendants maintain significant direction and control over the Accused Products and the actions of their users through such mechanisms.

65. For example, in order to use the Accused Products, Defendants require users at least to download the eero App, create an eero account or an Amazon account, accept Defendants' terms and conditions, create a local network, allow Defendants to have access to the local network, and allow Defendants to find and connect to devices on the local network. (*See, e.g.*, <https://www.youtube.com/watch?v=IA9coi29XaM>) (accessed August 3, 2022).

66. Defendants also provide instructions and directions to users online. For example, the eero support website, <https://support.eero.com/hc/en-us>, provides instructions and directions describing, e.g., how to set-up the Accused Products, how to change settings to the network of the Accused Products, and how to view network data from the network of the Accused Products. Further, Defendants provide instructions and directions to users on the eero website, eero.com, and Amazon's website, Amazon.com, in the form of, e.g., product information, technical specifications, customer reviews, and links to external sources like the above mentioned support

website. Additionally, Defendants provide further instructions and directions to users on third-party platforms such as YouTube.com.

67. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have induced and continue to induce the direct infringement of the '017 patent by users of the Accused Products pursuant to 35 U.S.C. § 271(b) in the United States and within this District. Defendants specifically intend for its customers and end users of the Accused Products to infringe the '017 patent and have known, at least since the filing of the Original Complaint in this action on July 13, 2021 that these uses by the users constitute infringement of the '017 patent.

68. In particular, Defendants' customers and other end users of the Accused Products ("Customer Infringers") directly infringe the '017 patent when using the Accused Products, including when placing new nodes into an eero network. *See, e.g.*, TrackThings' Infringement Contentions, incorporated by reference herein, which describe how use of an eero network and use of the Accused Products to add a new node to an eero network infringes the '017 patent.

69. Defendants admit they have known about the '017 patent at least since TrackThings filed the Original Complaint on July 13, 2021. In a response to TrackThings' interrogatory regarding Defendants' knowledge of the patents-in-suit, Defendants allege that their "first awareness of the asserted patents was no earlier than date of filing of the complaint in this case on July 13, 2021." (Defendants' Response to Interrogatory No. 3.) TrackThings filed its Original Complaint (D.I. 1) on July 13, 2021 against Defendants, alleging that Defendants infringe and continue to infringe the '017 patent. The Original Complaint was served on Defendants on July 15, 2021. Therefore, at a minimum, and as admitted by Defendants, Defendants had knowledge by July 13, 2021 when the Original Complaint was filed, and certainly had knowledge by July 15, 2021 when the Original Complaint was served.

70. Defendants specifically intend that the Customer Infringers infringe the '017 patent. For example, Defendants induced and continue to induce the direct infringement of the '017 patent by users of the Accused Products by selling or otherwise providing users the Accused Products. For example, Defendants list the Accused Products for sale on the eero website on at least the following URL: <https://eero.com/shop> (accessed August 3, 2022). Further, Defendants list the Accused Products for sale on the Amazon website on at least the following URL: <https://www.amazon.com/b?node=20077013011> (accessed August 3, 2022). Additionally, Defendants list the eero product line on at least the following URL: <https://support.eero.com/hc/en-us/articles/115005333406-What-are-the-model-numbers-for-eero-and-eero-Beacon-> (accessed August 3, 2022). The Accused Products are designed and intended to enable users to satisfy each limitation of the patented systems of the '017 patent.

71. As an additional example, Defendants induced and continue to induce the direct infringement of the '017 patent by users of the Accused Products by providing instructions and directions to users regarding the use of the Accused Products. For example, the eero support website, <https://support.eero.com/hc/en-us>, provides detailed instructions and directions describing, e.g., how to set-up the Accused Products, how to change settings to the network of the Accused Products, and how to view network data from the network of the Accused Products. Further, Defendants provide instructions and directions to users on the eero website, eero.com, and on the Amazon website, Amazon.com, in the form of, e.g., product information, technical specifications, customer reviews, and links to external sources like the above mentioned support website. Additionally, Defendants provide further instructions and directions to users on third-party platforms such as YouTube.com.

72. Defendants provide (including in the eero App, on the above-mentioned websites, and through technical support) instructions and directions regarding setting up a new eero network and the placement of a new node into an eero network using the eero App, thus specifically instructing and encouraging Customer Infringers to infringe the '017 patent.

73. For example, eero's support webpage includes a help center, with articles that specifically encourage and instruct Customer Infringers how to set up a new eero network, including under the menu "Getting started with eero." These articles include instructions on setting up an eero network (<https://support.eero.com/hc/en-us/articles/207937603-How-do-I-set-up-eero->), adding devices to the network (<https://support.eero.com/hc/en-us/articles/360000633246-How-do-I-add-devices-to-my-network->), and on where to place eero nodes (<https://support.eero.com/hc/en-us/articles/207897393-Where-should-I-place-my-eeros-> and <https://support.eero.com/hc/en-us/articles/115002967686-Where-should-I-place-my-eero-Beacon->). Included on these webpages is an eero YouTube video, "How to setup a new eero network". See <https://www.youtube.com/watch?v=1A9coi29XaM>.

74. Defendants' eero support website and other instructional information also specifically instruct and encourage users to add a new eero node to an eero network. For example, Defendants published on YouTube a video entitled, "How to add an eero to your network". See <https://www.youtube.com/watch?v=WBebchS0twU>. As another example, the eero App includes specific directions and instructions for setting up an eero network and adding a new node to a network. eero's support webpage similarly includes articles on how to manage an eero network (<https://support.eero.com/hc/en-us/sections/201775283-Managing-your-network>). This support page includes articles on adding and removing eeros from a network (<https://support.eero.com/hc/en-us/articles/207895233-How-do-I-add-or-remove-eeros-from-my->

[network-](https://support.eero.com/hc/en-us/articles/115000421046-How-do-I-see-all-the-eeros-on-my-network-)), seeing all the eeros on the network (<https://support.eero.com/hc/en-us/articles/115000421046-How-do-I-see-all-the-eeros-on-my-network->), understanding speed tests (<https://support.eero.com/hc/en-us/articles/209605633-Understanding-your-eero-speed-tests->) and network status (<https://support.eero.com/hc/en-us/articles/207895063-Understanding-your-current-network-status->), and finding the connection strength and status of the eeros (<https://support.eero.com/hc/en-us/articles/215072846-How-can-I-find-the-connection-strength-and-status-of-my-eeros->). The eero support website also includes articles on where to place eeros (<https://support.eero.com/hc/en-us/articles/207897393-Where-should-I-place-my-eeros->).

75. As described in, among other things, TrackThings' Infringement Contentions, setting up an eero network and then using the eero App to add a new eero node to that network is an infringing use of the '017 patent's claimed invention. For example, Claim 1 of the patent requires an ad-hoc wireless network comprising at least one client, a plurality of relays each in a known location, and a computational unit distributed within the ad-hoc network. An eero network is an ad-hoc wireless network. Any device such as a smartphone, tablet, computer, smart television, etc., that connects to this network is a client, the eero nodes in an eero network are relays each in a known location, and the nodes and eero App together constitute a computational unit. Defendants, including through the above-described instructions and documentation, specifically encourage its Customer Infringers to use the eero nodes and eero App to establish such a network.

76. Moreover, in Claim 1, the computational unit is capable of "measuring a link integrity of each link in the ad-hoc wireless network" and "determin[ing] a placement of a new relay at a new location into the ad-hoc wireless network to improve the link integrity of the ad-hoc wireless network." A Customer Infringer's use of the eero App, which shows, among other things, signal strength, in the placement of a new node is an infringing use the claim. For example, the

eero App gives users recommendations for the placement of new eero mesh extenders (e.g., based on the size of a home), detects the addition of new relays, tests users' placement of the new relay, and instructs users to adjust their placement of an eero based on the results of the placement test. (See <https://youtu.be/2RLon4g2imI?t=147>); (See <https://support.eero.com/hc/en-us/articles/115005497123-How-much-distance-should-there-be-between-eeros->) (accessed August 3, 2022). Therefore, Defendants, as evidenced, by, e.g., their support webpage, YouTube videos, and the eero App itself, actively encourage infringement of the '017 patent.

77. As a further example, Defendants induced and continue to induce the direct infringement of the '017 patent by users of the Accused Products by providing software updates to the Accused Products, which are designed and intended to enable users to perform or continue to perform each component and step of the patented systems and methods of the '017 patent. For example, Defendants instruct users as to how to upgrade the firmware of the Accused Products, and in some cases require users to upgrade the software of the Accused Products. (See, e.g., <https://support.eero.com/hc/en-us/articles/360024852892-How-can-I-be-notified-when-my-network-has-updated->) (accessed August 3, 2022). For example, Defendants push new versions of the eero App to their users' mobile devices. (See, e.g., <https://apps.apple.com/us/app/eero-home-wifi-system/id1023499075>) (accessed August 3, 2022).

78. Defendants have engaged in these activities with knowledge and intent that such activities would cause and/or encourage direct infringement of the '017 patent. Defendants know (or at a minimum should know) that this conduct amounts to infringement of the '017 patent.

79. After acquiring this knowledge, Defendants have continued to conduct the same activity that was accused of infringement of the '017 patent, without making any changes to the Accused Products in order to avoid (or even attempt to avoid) that infringement.

80. In Interrogatory No. 3, TrackThings asked Defendants what actions they took upon learning of the asserted patents, including the '017 patent. Defendants readily admit that they took no action whatsoever. (Defendants' Response to Interrogatory No. 3.)

81. Moreover, Defendants have produced no technical documentation to show that any changes were made to the Accused Products in light of their knowledge of the '017 patent. And Defendants continue to make and sell the Accused Products without alteration, including those identified in the Original Complaint.

82. TrackThings identified how the Accused Products infringe the '017 patent in (a) the Original Complaint, (b) TrackThings' initial infringement contentions, (c) TrackThings' amended infringement contentions, and (d) in TrackThings' final infringement contentions.

83. TrackThings filed the Original Complaint on July 13, 2021 and served the Original Complaint on Defendants on July 15, 2021.

84. TrackThings then served Preliminary Infringement Contentions on September 21, 2021.

85. On March 7, 2022, Defendants sent a letter to TrackThings identifying alleged deficiencies in some of TrackThings' infringement theories.

86. TrackThings responded to that letter on March 18, 2022, and provided additional details to Defendants in amended infringement contentions on May 4, 2022, and final infringement contentions on June 29, 2022.

87. Since TrackThings served its Original Complaint on July 15, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '017 patent in that Original Complaint.

88. Since TrackThings served its Original Complaint on July 15, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '017 patent in that Original Complaint.

89. Since TrackThings served its Preliminary Infringement Contentions on September 21, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '017 patent in those Contentions.

90. Since TrackThings served its First Amended Preliminary Infringement Contentions on May 4, 2022 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '017 patent in that Original Complaint.

91. Since TrackThings served its Final Infringement Contentions on June 29, 2022 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '017 patent in that Original Complaint.

92. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have contributed, and continue to contribute, to the direct infringement by users of the Accused Products of claims of the '017 patent (including, without limitation, the claims addressed above) pursuant to 35 U.S.C. § 271(c) in the United States and within this District at least by providing the Accused Products, which are designed and intended to enable users of the Accused Products to use each limitation of the patented systems of the '017 patent. For example, Defendants instruct and direct users of the Accused Products to install and operate mesh WiFi systems as

described herein, knowing that the Accused Products are a material part of the claimed inventions, are especially made or especially adapted for use in infringing the patented systems and methods, and are not staple articles or commodities of commerce for substantial non-infringing use.

93. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have and continue to infringe the '017 patent pursuant to 35 U.S.C. § 271(f)(1) by supplying or causing to be supplied in or from the United States all or a substantial portion of the components of the Accused Products, which are uncombined in whole or in part, intending and actively inducing the combination of such components outside the United States in a manner that would infringe the '017 patent if such combination occurred within the United States.

94. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have and continue to infringe the '017 patent pursuant to 35 U.S.C. § 271(f)(2) by supplying or causing to be supplied in or from the United States component(s) of the Accused Products, that are especially made or especially adapted for use in infringing the '017 patented systems, and not staple articles or commodities of commerce for substantial non-infringing use, which are uncombined in whole or in part, knowing that such component(s) are so made or adapted and intending that such component(s) will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States.

95. As a consequence of Defendants' infringement, both literal and under the doctrine of equivalents, of the '017 patent, TrackThings has been damaged in an amount not yet determined and is entitled to recover damages pursuant to 35 U.S.C. § 284.

96. Defendants' infringement of the '017 patent has been and continues to be willful at least since the filing of the Original Complaint on July 13, 2021.

97. *First*, Defendants knew of the '017 patent at least since the filing and/or service of the Original Complaint in this action (*see* above at ¶ 69, incorporated by reference herein).

98. *Second*, after acquiring that knowledge, Defendants have continued to conduct the same activity that was accused of infringement of the '017 patent. As described above in ¶ 80, incorporated by reference herein, TrackThings asked Defendants what actions they took upon learning of the asserted patents, including the '017 patent, and Defendants readily admit that they took no action whatsoever. (Defendants' Response to Interrogatory No. 3.)

99. *Third*, in doing so, Defendants knew, or should have known, that their conduct amounted to infringement of the '017 patent and that the '017 patent is valid. As described in above at ¶ 82, incorporated by reference herein, TrackThings explained its infringement theory in the Original Complaint and in three rounds of Infringement Contentions. TrackThings has asked Defendants for its non-infringement positions, but Defendants did not substantively respond—instead Defendants simply listed the limitations from the claims and stated without factual bases that their products do not meet these limitations.

VI. COUNT TWO – (Infringement of U.S. Patent No. 9,332,442)

100. TrackThings realleges and incorporates by reference each of the preceding paragraphs, as if fully set forth herein.

101. Defendants have and continue to directly and/or indirectly infringe one or more claims, including Claims 1-2, 4-5, 7-10, 12-13, 15-18, 20-21, and 23-25 of the '442 patent in this District and elsewhere in Texas and the United States at least for the reasons explained in TrackThings' Infringement Contentions incorporated herein by reference.

102. Claim 1 of the '442 patent, for example, covers:

A configurable network comprising:

at least one relay, each relay containing a plurality of software radios;

a plurality of streams of bits each partitioned into a plurality of portions;

an input stream of bits from the Internet received by a first relay;

the first relay transmitting an output stream of bits to the Internet;

a plurality of cell phones coupled to the first relay;

a first software radio in the first relay configured to pass a first portion of the input stream of bits received from the Internet as a first portion of a first stream of bits transmitted to a first cell phone;

the first software radio configured to pass a first portion of a second stream of bits received from the first cell phone as a first portion of the output stream of bits transmitted to the Internet;

the first software radio configured to transfer a second portion of the input stream of bits received from the Internet to a second software radio in the first relay, the second software radio configured to transmit the second portion of the input stream of bits as a first portion of a third stream of bits to a second cell phone; and

the second software radio configured to transfer a first portion of a fourth stream of bits received from the second cell phone to the first software radio, the first software radio configured to transmit the first portion of the fourth stream as a second portion of the output stream of bits to the Internet.

103. The Accused Products include a configurable network with relays, where each relay has a plurality of software radios. For example, the Accused Products can be dual-band systems or tri-band systems.

104. The configurable network of the Accused Products enables a first relay to (i) transmit portions of streams of bits between the internet and a first cellphone through a first software radio, and (ii) transmit portions of streams of bits between the internet and a second cell phone through the first software radio and a second software radio. For example, the Accused Products indicate that a client (e.g., a cellphone) is connected to a particular software radio in a

particular eero mesh edge router or eero mesh extender in the network and thus is connected to, and communicating with, the internet through that software radio.

105. The Accused Products use one frequency band as a dedicated backhaul to connect eero mesh extenders to each other and to the eero mesh edge router. In an eero mesh extender, one software radio (a first software radio) is used for communications to/from the eero mesh edge router, i.e., for the input streams and output streams to and from the internet.

106. Additionally, each eero mesh extender uses multiple software radios/bands to communicate with client devices. For example, a first software radio in an eero mesh extender can send data between the internet and a first device (e.g., a first cell phone). A second software radio in that eero mesh extender that is in communication with a second device (e.g., a second cell phone) reaches the internet via connection to the first software radio.

107. The Accused Products, alone and/or in conjunction with Additional Products, directly infringe the '442 patent by using the technology of transmitting and receiving portions of streams of bits between the internet and multiple devices (e.g., a first and second cell phone).

108. For at least these reasons, Defendants, directly and/or through subsidiaries, agents, and/or business partners, have directly infringed, literally or under the doctrine of equivalents, claims of the '442 patent pursuant to 35 U.S.C. § 271(a) by making, having made, using, selling, offering for sale, and/or importing systems and methods protected thereby including the Accused Products, within the United States and within this district.

109. Defendants also directly infringe the claims of the '442 patent pursuant to 35 U.S.C. § 271(a) to the extent that Defendants demonstrate use of the system for others in advertising, promotion or otherwise.

110. Defendants also infringe the asserted claims of the '442 patent by directing and controlling the actions of its users because they put the invention into service, i.e., control the system as a whole and obtain benefit from it such that Defendants are liable for direct infringement under 35 U.S.C. § 271(a).

111. The benefits of the Accused Products are conditioned on the performance of certain steps identified by Defendants, and users operate the Accused Products under the instructions and directions prescribed by Defendants. For example, in order to obtain the benefits of the Accused Products, (e.g. seamless whole-home WiFi coverage), Defendants require users to install, use and maintain the Accused Products in a manner Defendants prescribe, including the requirement that users install the eero App to use and operate the Accused Products. Defendants maintain significant direction and control over the Accused Products and the actions of their users through such mechanisms.

112. For example, in order to use the Accused Products, Defendants require users at least to download the eero App, create an eero account or an Amazon account, accept Defendants' terms and conditions, create a local network, allow Defendants to have access to the local network, and allow Defendants to find and connect to devices on the local network. (*See, e.g.,* <https://www.youtube.com/watch?v=IA9coi29XaM>) (accessed August 3, 2022).

113. Defendants also provide instructions and directions to users online. For example, the eero support website, <https://support.eero.com/hc/en-us>, provides instructions and directions describing, e.g., how to set-up the Accused Products, how to change settings to the network of the Accused Products, and how to view network data from the network of the Accused Products. Further, Defendants provide instructions and directions to users on the eero website, eero.com, and Amazon's website, Amazon.com, in the form of, e.g., product information, technical

specifications, customer reviews, and links to external sources like the above mentioned support website. Additionally, Defendants provide further instructions and directions to users on third-party platforms such as YouTube.com.

114. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have induced and continue to induce the direct infringement of the '442 patent by users of the Accused Products pursuant to 35 U.S.C. § 271(b) in the United States and within this District. Defendants specifically intend for its customers and end users of the Accused Products to infringe the '442 patent and have known, at least since the filing of the Original Complaint in this action on July 13, 2021 that these uses by the users constitute infringement of the '442 patent.

115. In particular, Customer Infringers directly infringe the '442 patent when using the Accused Products, including when connecting more than one client device to the internet. *See, e.g.,* TrackThings' Infringement Contentions, incorporated by reference herein, which describe how use of an eero network and use of the Accused Products to connect more than one client device to the internet infringes the '442 patent.

116. Defendants admit they have known about the '442 patent at least since TrackThings filed the Original Complaint on July 13, 2021. In a response to TrackThings' interrogatory regarding Defendants' knowledge of the patents-in-suit, Defendants allege that their "first awareness of the asserted patents was no earlier than date of filing of the complaint in this case on July 13, 2021." (Defendants' Response to Interrogatory No. 3.) TrackThings filed its Original Complaint (D.I. 1) on July 13, 2021 against Defendants, alleging that Defendants infringe and continue to infringe the '442 patent. The Original Complaint was served on Defendants on July 15, 2021. Therefore, at a minimum, and as admitted by Defendants, Defendants had knowledge

by July 13, 2021 when the Original Complaint was filed, and certainly had knowledge by July 15, 2021 when the Original Complaint was served.

117. Defendants specifically intend that the Customer Infringers infringe the '442 patent. For example, Defendants induced and continue to induce the direct infringement of the '442 patent by users of the Accused Products by selling or otherwise providing users the Accused Products. For example, Defendants list the Accused Products for sale on the eero website on at least the following URL: <https://eero.com/shop> (accessed August 3, 2022). Further, Defendants list the Accused Products for sale on the Amazon website on at least the following URL: <https://www.amazon.com/b?node=20077013011> (accessed August 3, 2022). Additionally, Defendants list the eero product line on at least the following URL: <https://support.eero.com/hc/en-us/articles/115005333406-What-are-the-model-numbers-for-eero-and-eero-Beacon-> (accessed August 3, 2022). The Accused Products are designed and intended to enable users to perform each component and step of the patented systems and methods of the '442 patent.

118. As an additional example, Defendants induced and continue to induce the direct infringement of the '442 patent by users of the Accused Products by providing instructions and directions to users regarding the use of the Accused Products. For example, the eero support website, <https://support.eero.com/hc/en-us>, provides detailed instructions and directions describing, e.g., how to set-up the Accused Products, how to change settings to the network of the Accused Products, and how to view network data from the network of the Accused Products. Further, Defendants provide instructions and directions to users on the eero website, eero.com, and on the Amazon website, Amazon.com, in the form of, e.g., product information, technical specifications, customer reviews, and links to external sources like the above mentioned support

website. Additionally, Defendants provide further instructions and directions to users on third-party platforms such as YouTube.com.

119. Defendants provide (including in the eero App, on the above-mentioned websites, and through technical support) instructions and directions regarding setting up a new eero network and connecting devices like cellphones to the network. Thus, Defendants specifically instruct and encourage Customer Infringers to infringe the '442 patent.

120. For example, Defendants' eero support website and other instructional information specifically instruct and encourage users on how to connect devices like cellphones to an eero network. For example, Defendants teach that one eero node can support up to 128 devices and for best results "up to 30 devices with each eero." *See, e.g.,* <https://support.eero.com/hc/en-us/articles/207926363-How-many-devices-can-one-eero-support->. eero also provides instructions on how to add a device to the eero network. *See, e.g.,* <https://support.eero.com/hc/en-us/articles/360000633246-How-do-I-add-devices-to-my-network->. Similarly, the eero App itself helps a user connect devices like cellphones to the eero network, including by showing the frequency band used to connect each device. And eero's website explains how Wi-Fi 6E devices can directly access the newly accessible 6 GHz band.

121. TrackThings has described in its Infringement Contentions (incorporated by reference herein) how the use of software radios in eero nodes to connect multiple devices like cellphones to the Internet infringes the '442 patent. As one example, when the eero nodes in a network communicate on one frequency band and that same band is used by a satellite node to communicate with a first cellphone, and a different band on the same node is used to communicate with a second cellphone, the resulting eero network meets the limitations of the asserted claims. Defendants, as evidenced, by, e.g., their support webpage, YouTube videos, and the eero App

itself, actively encourage Customer Infringers to connect up to dozens of devices, including cellphones, to their eero networks, thus actively encouraging infringement of the '442 patent.

122. As a further example, Defendants induced and continue to induce the direct infringement of the '442 patent by users of the Accused Products by providing software updates to the Accused Products, which are designed and intended to enable users to perform or continue to perform each component and step of the patented systems and methods of the '442 patent. For example, Defendants instruct users as to how to upgrade the firmware of the Accused Products, and in some cases require users to upgrade the software of the Accused Products. (*See, e.g.*, <https://support.eero.com/hc/en-us/articles/360024852892-How-can-I-be-notified-when-my-network-has-updated->) (accessed August 3, 2022). For example, Defendants push new versions of the eero App to their users' mobile devices. (*See, e.g.*, <https://apps.apple.com/us/app/eero-home-wifi-system/id1023499075>) (accessed August 3, 2022).

123. Defendants have engaged in these activities with knowledge and intent that such activities would cause and/or encourage direct infringement of the '442 patent. Defendants know (or at a minimum should know) that this conduct amounts to infringement of the '442 patent.

124. After acquiring this knowledge, Defendants have continued to conduct the same activity that was accused of infringement of the '442 patent, without making any changes to the Accused Products in order to avoid (or even attempt to avoid) that infringement.

125. In Interrogatory No. 3, TrackThings asked Defendants what actions they took upon learning of the asserted patents, including the '442 patent. Defendants readily admit that they took no action whatsoever. (Defendants' Response to Interrogatory No. 3.)

126. Moreover, Defendants have produced no technical documentation to show that any changes were made to the Accused Products in light of their knowledge of the '442 patent. And

Defendants continue to make and sell the Accused Products without alteration, including those identified in the Original Complaint.

127. TrackThings identified how the Accused Products infringe the '442 patent in (a) the Original Complaint, (b) TrackThings' initial infringement contentions, (c) TrackThings' amended infringement contentions, and (d) in TrackThings' final infringement contentions.

128. TrackThings filed the Original Complaint on July 13, 2021 and served the Original Complaint on Defendants on July 15, 2021.

129. TrackThings then served Preliminary Infringement Contentions on September 21, 2021.

130. On March 7, 2022, Defendants sent a letter to TrackThings identifying alleged deficiencies in some of TrackThings' infringement theories.

131. TrackThings responded to that letter on March 18, 2022, and provided additional details to Defendants in amended infringement contentions on May 4, 2022, and final infringement contentions on June 29, 2022.

132. Since TrackThings served its Original Complaint on July 15, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '442 patent in that Original Complaint.

133. Since TrackThings served its Original Complaint on July 15, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '442 patent in that Original Complaint.

134. Since TrackThings served its Preliminary Infringement Contentions on September 21, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '442 patent in those Contentions.

135. Since TrackThings served its First Amended Preliminary Infringement Contentions on May 4, 2022 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '442 patent in that Original Complaint.

136. Since TrackThings served its Final Infringement Contentions on June 29, 2022 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '442 patent in that Original Complaint.

137. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have contributed, and continue to contribute, to the direct infringement by users of the Accused Products of claims of the '442 patent (including, without limitation, the claims addressed above) pursuant to 35 U.S.C. § 271(c) in the United States and within this District at least by providing the Accused Products, which are designed and intended to enable users of the Accused Products to use and perform each component and step of the patented systems and methods of the '442 patent. For example, Defendants instruct and direct users of the Accused Products to install and operate mesh WiFi systems as described herein, knowing that the Accused Products are a material part of the claimed inventions, are especially made or especially adapted for use in infringing the patented systems and methods, and are not staple articles or commodities of commerce for substantial non-infringing use.

138. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have and continue to infringe the '442 patent pursuant to 35 U.S.C. § 271(f)(1) by supplying or causing to be supplied in or from the United States all or a substantial portion of the components of the Accused Products, which are uncombined in whole or in part, intending and actively inducing the combination of such components outside the United States in a manner that would infringe the '442 patent if such combination occurred within the United States.

139. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have and continue to infringe the '442 patent pursuant to 35 U.S.C. § 271(f)(2) by supplying or causing to be supplied in or from the United States component(s) of the Accused Products, that are especially made or especially adapted for use in infringing the '442 patented systems, and not staple articles or commodities of commerce for substantial non-infringing use, which are uncombined in whole or in part, knowing that such component(s) are so made or adapted and intending that such component(s) will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States.

140. As a consequence of Defendants' infringement, both literal and under the doctrine of equivalents, of the '442 patent, TrackThings has been damaged in an amount not yet determined and is entitled to recover damages pursuant to 35 U.S.C. § 284.

141. Defendants' infringement of the '442 patent has been and continues to be willful at least since the filing of the Original Complaint on July 13, 2021.

142. *First*, Defendants knew of the '442 patent at least since the filing and/or service of the Original Complaint in this action (*see* above at ¶ 116, incorporated by reference herein).

143. *Second*, after acquiring that knowledge, Defendants have continued to conduct the same activity that was accused of infringement of the '442 patent. As described above in ¶ 125,

incorporated by reference herein, TrackThings asked Defendants what actions they took upon learning of the asserted patents, including the '442 patent, and Defendants readily admit that they took no action whatsoever. (Defendants' Response to Interrogatory No. 3.)

144. *Third*, in doing so, Defendants knew, or should have known, that their conduct amounted to infringement of the '442 patent and that the '442 patent is valid. As described in above at ¶ 127, incorporated by reference herein, TrackThings explained its infringement theory in the Original Complaint and in three rounds of Infringement Contentions. TrackThings has asked Defendants for its non-infringement positions, but Defendants did not substantively respond—instead Defendants simply listed the limitations from the claims and stated without factual bases that their products do not meet these limitations.

VII. COUNT THREE – (Infringement of U.S. Patent No. 10,107,893)

145. TrackThings realleges and incorporates by reference each of the preceding paragraphs, as if fully set forth herein.

146. Defendants have and continue to directly and/or indirectly infringe one or more claims, including Claims 1-3 and 8-12, of the '893 patent in this District and elsewhere in Texas and the United States at least for the reasons explained in TrackThings' Infringement Contentions incorporated herein by reference.

147. Claim 1 of the '893 patent, for example, covers:

An intelligent network comprising:

a first node of a plurality of nodes assigned as a master node;

all remaining nodes of said plurality of nodes assigned as slave nodes;

said master node coupled by a direct bidirectional link to each one of said slave nodes, wherein

each said slave node exclusively communicates information with another slave node through said master node;

one of said slave nodes assigned by said intelligent network as a current master node;

said first node assigned by said intelligent network as a new slave node; and

said current master node coupled by a new direct bidirectional link to each of said slave nodes.

148. The Accused Products include an intelligent network comprising a first node of a plurality of nodes assigned as a master node and all remaining nodes of said plurality of nodes assigned as slave nodes.

149. The intelligent network of the Accused Products can use multiple topologies to connect eero mesh extenders and an eero mesh edge router (all “nodes”) using bidirectional links. When the Accused Products are installed with one eero mesh edge router and two eero mesh extenders (as one example), they can be configured in only one of a star topology or a daisy-chain topology at a given time.

150. A daisy-chain topology is where, for example, a first eero mesh extender (the “master node”) is connected to both a second eero mesh extender and the eero mesh edge router (both “slave nodes”), whereby the second eero mesh extender and the eero mesh edge router communicate with each other through the first eero mesh extender; and a star topology is where, for example, each eero mesh extender (now the “slave nodes”) connects to the eero mesh edge router (now the “master node”), and the two eero mesh extenders communicate with each other through the edge router.

151. When the Accused Products are in the daisy-chain topology, the middle eero mesh extender is the master node, through which the other eero mesh extender and the eero mesh edge router, the slave nodes, exclusively communicate.

152. When the Accused Products are in the star topology, the two eero mesh extenders are the slave nodes and the eero mesh edge router is the master node through which the slave nodes exclusively communicate.

153. The intelligent network of the Accused Products can dynamically reconfigure between star and daisy-chain topologies, whereby one of said slave nodes of the Accused Products is then assigned by said intelligent network as a current master node and said first node is assigned by said intelligent network as a new slave node.

154. When switching from daisy-chain to star topology, the eero mesh edge router, one of said slave nodes, is assigned by said intelligent network as a current master node and the middle eero mesh extender, said first node, is assigned by said intelligent network as a new slave node. When switching from star to daisy-chain topology, the middle eero mesh extender, one of said slave nodes, is assigned by said intelligent network as a current master node and the eero mesh edge router, said first node, is assigned by said intelligent network as a new slave node.

155. The Accused Products' implementation of star and daisy-chain topologies, and the Accused Products' dynamic reconfiguration between one topology and another infringes the '893 patent.

156. The Accused Products, alone and/or in conjunction with Additional Products, directly infringe the '893 patent by the implementation of star and daisy-chain topologies, and the Accused Products' dynamic reconfiguration between one topology and another.

157. For at least these reasons, Defendants, directly and/or through subsidiaries, agents, and/or business partners, have directly infringed, literally or under the doctrine of equivalents, claims of the '893 patent pursuant to 35 U.S.C. § 271(a) by making, having made, using, selling,

offering for sale, and/or importing systems protected thereby including the Accused Products, within the United States and within this district.

158. Defendants also directly infringe the claims of the '893 patent pursuant to 35 U.S.C. § 271(a) to the extent that Defendants demonstrate use of the system for others in advertising, promotion or otherwise.

159. Defendants also infringe the asserted claims of the '893 patent by directing and controlling the actions of its users because they put the invention into service, i.e., control the system as a whole and obtain benefit from it such that Defendants are liable for direct infringement under 35 U.S.C. § 271(a).

160. The benefits of the Accused Products are conditioned on the performance of certain steps identified by Defendants, and users operate the Accused Products under the instructions and directions prescribed by Defendants. For example, in order to obtain the benefits of the Accused Products, (e.g. seamless whole-home WiFi coverage), Defendants require users to install, use and maintain the Accused Products in a manner Defendants prescribe, including the requirement that users install the eero App to use and operate the Accused Products. Defendants maintain significant direction and control over the Accused Products and the actions of their users through such mechanisms.

161. For example, in order to use the Accused Products, Defendants require users at least to download the eero App, create an eero account or an Amazon account, accept Defendants' terms and conditions, create a local network, allow Defendants to have access to the local network, and allow Defendants to find and connect to devices on the local network. (*See, e.g.*, <https://www.youtube.com/watch?v=IA9coi29XaM>) (accessed August 3, 2022).

162. Defendants also provide instructions and directions to users online. For example, the eero support website, <https://support.eero.com/hc/en-us>, provides instructions and directions describing, e.g., how to set-up the Accused Products, how to change settings to the network of the Accused Products, and how to view network data from the network of the Accused Products. Further, Defendants provide instructions and directions to users on the eero website, eero.com, and Amazon's website, Amazon.com, in the form of, e.g., product information, technical specifications, customer reviews, and links to external sources like the above mentioned support website. Additionally, Defendants provide further instructions and directions to users on third-party platforms such as YouTube.com.

163. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have induced and continue to induce the direct infringement of the '893 patent by users of the Accused Products pursuant to 35 U.S.C. § 271(b) in the United States and within this District. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have induced and continue to induce the direct infringement of the '893 patent by users of the Accused Products pursuant to 35 U.S.C. § 271(b) in the United States and within this District. Defendants specifically intend for its customers and end users of the Accused Products to infringe the '893 patent and have known, at least since the filing of the Original Complaint in this action on July 13, 2021 that these uses by the users constitute infringement of the '893 patent.

164. In particular, Customer Infringers directly infringe the '893 patent when using the Accused Products, including when network traffic and/or network conditions cause a user's network to dynamically reconfigure between star and daisy-chain topologies. *See, e.g.,* TrackThings' Infringement Contentions, incorporated by reference herein, which describe how

use of an eero network and use of the Accused Products to dynamically reconfigure the topology of an eero network between star and daisy-chain topologies infringes the '893 patent.

165. Defendants admit they have known about the '893 patent at least since TrackThings filed the Original Complaint on July 13, 2021. In a response to TrackThings' interrogatory regarding Defendants' knowledge of the patents-in-suit, Defendants allege that their "first awareness of the asserted patents was no earlier than date of filing of the complaint in this case on July 13, 2021." (Defendants' Response to Interrogatory No. 3.) TrackThings filed its Original Complaint (D.I. 1) on July 13, 2021 against Defendants, alleging that Defendants infringe and continue to infringe the '893 patent. The Original Complaint was served on Defendants on July 15, 2021. Therefore, at a minimum, and as admitted by Defendants, Defendants had knowledge by July 13, 2021 when the Original Complaint was filed, and certainly had knowledge by July 15, 2021 when the Original Complaint was served.

166. Defendants specifically intend that the Customer Infringers infringe the '893 patent. Defendants induced and continue to induce the direct infringement of the '893 patent by users of the Accused Products by selling or otherwise providing users the Accused Products. For example, Defendants list the Accused Products for sale on the eero website on at least the following URL: <https://eero.com/shop> (accessed August 3, 2022). Further, Defendants list the Accused Products for sale on the Amazon website on at least the following URL: <https://www.amazon.com/b?node=20077013011> (accessed August 3, 2022). Additionally, Defendants list the eero product line on at least the following URL: <https://support.eero.com/hc/en-us/articles/115005333406-What-are-the-model-numbers-for-eero-and-eero-Beacon-> (accessed August 3, 2022). The Accused Products are designed and intended to enable users to perform each component of the patented systems of the '893 patent.

167. As an additional example, Defendants induced and continue to induce the direct infringement of the '893 patent by users of the Accused Products by providing instructions and directions to users regarding the use of the Accused Products. For example, the eero support website, <https://support.eero.com/hc/en-us>, provides detailed instructions and directions describing, e.g., how to set-up the Accused Products, how to change settings to the network of the Accused Products, and how to view network data from the network of the Accused Products. Further, Defendants provide instructions and directions to users on the eero website, eero.com, and on the Amazon website, Amazon.com, in the form of, e.g., product information, technical specifications, customer reviews, and links to external sources like the above mentioned support website. Additionally, Defendants provide further instructions and directions to users on third-party platforms such as YouTube.com.

168. Defendants provide (including in the eero App, on the above-mentioned websites, and through technical support) instructions and directions regarding setting up a new eero network with at least three eero nodes (i.e., an eero network where the network topology can change in a manner that infringes the '893 patent.)

169. For example, eero's support webpage includes a help center, with articles that specifically encourage and instruct Customer Infringers to setup a new eero network, including under the menu "Getting started with eero." These articles include instructions on setting up an eero network (<https://support.eero.com/hc/en-us/articles/207937603-How-do-I-set-up-eero->), adding devices to the network (<https://support.eero.com/hc/en-us/articles/360000633246-How-do-I-add-devices-to-my-network->), and on where to place eero nodes (<https://support.eero.com/hc/en-us/articles/207897393-Where-should-I-place-my-eeros-> and <https://support.eero.com/hc/en-us/articles/115002967686-Where-should-I-place-my-eero->

Beacon-). Included on these webpages is an eero YouTube video, “How to setup a new eero network”. See <https://www.youtube.com/watch?v=1A9coi29XaM>.

170. More specifically, Defendants encourage users to establish eero networks with three or more nodes. For example, Defendants often sell eero nodes as a (3-pack) (*see, e.g.*, <https://eero.com/shop>; https://www.amazon.com/eero-Pro-WiFi-System-Pros/dp/B071DWXLYL/ref=sr_1_2?keywords=eero+3+pack&qid=1659094167&sr=8-2) thus specifically encouraging Customer Infringers to establish home eero networks with three eero nodes. For example, on eero’s support webpage, Defendants expressly recommend using three nodes (e.g., 1 eero and 2 beacons) for “most homes.” <https://support.eero.com/hc/en-us/articles/207624886-How-many-eeros-do-I-need->. The eero App and eero’s other instructional information specifically guides a Customer Infringer in the setup and use of three-node networks.

171. As described in TrackThings’ Infringement Contentions, use of such a network infringes the ’893 patent, including, e.g., because such a network can switch between a daisy-chain topology (with one master node) and a star topology (with a different master node) where, in either topology, slave nodes communicate to each through the master node.

172. As a further example, Defendants induced and continue to induce the direct infringement of the ’893 patent by users of the Accused Products by providing software updates to the Accused Products, which are designed and intended to enable users to perform or continue to perform each component of the patented systems of the ’893 patent. For example, Defendants instruct users as to how to upgrade the firmware of the Accused Products, and in some cases require users to upgrade the software of the Accused Products. (*See, e.g.*, <https://support.eero.com/hc/en-us/articles/360024852892-How-can-I-be-notified-when-my-network-has-updated->) (accessed August 3, 2022). For example, Defendants push new versions of the eero App to their users’ mobile

devices. (See, e.g., <https://apps.apple.com/us/app/eero-home-wifi-system/id1023499075>) (accessed August 3, 2022).

173. Defendants have engaged in these activities with knowledge and intent that such activities would cause and/or encourage direct infringement of the '893 patent. Defendants know (or at a minimum should know) that this conduct amounts to infringement of the '893 patent.

174. After acquiring this knowledge, Defendants have continued to conduct the same activity that was accused of infringement of the '893 patent, without making any changes to the Accused Products in order to avoid (or even attempt to avoid) that infringement.

175. In Interrogatory No. 3, TrackThings asked Defendants what actions they took upon learning of the asserted patents, including the '893 patent. Defendants readily admit that they took no action whatsoever. (Defendants' Response to Interrogatory No. 3.)

176. Moreover, Defendants have produced no technical documentation to show that any changes were made to the Accused Products in light of their knowledge of the '893 patent. And Defendants continue to make and sell the Accused Products without alteration, including those identified in the Original Complaint.

177. TrackThings identified how the Accused Products infringe the '893 patent in (a) the Original Complaint, (b) TrackThings' initial infringement contentions, (c) TrackThings' amended infringement contentions, and (d) in TrackThings' final infringement contentions.

178. TrackThings filed the Original Complaint on July 13, 2021 and served the Original Complaint on Defendants on July 15, 2021.

179. TrackThings then served Preliminary Infringement Contentions on September 21, 2021.

180. On March 7, 2022, Defendants sent a letter to TrackThings identifying alleged deficiencies in some of TrackThings' infringement theories.

181. TrackThings responded to that letter on March 18, 2022, and provided additional details to Defendants in amended infringement contentions on May 4, 2022, and final infringement contentions on June 29, 2022.

182. Since TrackThings served its Original Complaint on July 15, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '893 patent in that Original Complaint.

183. Since TrackThings served its Original Complaint on July 15, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '893 patent in that Original Complaint.

184. Since TrackThings served its Preliminary Infringement Contentions on September 21, 2021 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '893 patent in those Contentions.

185. Since TrackThings served its First Amended Preliminary Infringement Contentions on May 4, 2022 which included allegations of infringement against Defendants, Defendants have not altered or changed any of the accused features or functionalities identified as infringing the '893 patent in that Original Complaint.

186. Since TrackThings served its Final Infringement Contentions on June 29, 2022 which included allegations of infringement against Defendants, Defendants have not altered

or changed any of the accused features or functionalities identified as infringing the '893 patent in that Original Complaint.

187. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have contributed, and continue to contribute, to the direct infringement by users of the Accused Products of claims of the '893 patent (including, without limitation, the claims addressed above) pursuant to 35 U.S.C. § 271(c) in the United States and within this District at least by providing the Accused Products, which are designed and intended to enable users of the Accused Products to use and perform each component of the patented systems of the '893 patent. For example, Defendants instruct and direct users of the Accused Products to install and operate mesh WiFi systems as described herein, knowing that the Accused Products are a material part of the claimed inventions, are especially made or especially adapted for use in infringing the patented systems, and are not staple articles or commodities of commerce for substantial non-infringing use.

188. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have and continue to infringe the '893 patent pursuant to 35 U.S.C. § 271(f)(1) by supplying or causing to be supplied in or from the United States all or a substantial portion of the components of the Accused Products, which are uncombined in whole or in part, intending and actively inducing the combination of such components outside the United States in a manner that would infringe the '893 patent if such combination occurred within the United States.

189. Defendants, directly and/or through subsidiaries, affiliates, agents, and/or business partners, have and continue to infringe the '893 patent pursuant to 35 U.S.C. § 271(f)(2) by supplying or causing to be supplied in or from the United States component(s) of the Accused Products, that are especially made or especially adapted for use in infringing the '893 patented

systems, and not staple articles or commodities of commerce for substantial non-infringing use, which are uncombined in whole or in part, knowing that such component(s) are so made or adapted and intending that such component(s) will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States.

190. As a consequence of Defendants' infringement, both literal and under the doctrine of equivalents, of the '893 patent, TrackThings has been damaged in an amount not yet determined and is entitled to recover damages pursuant to 35 U.S.C. § 284.

191. Defendants' infringement of the '893 patent has been and continues to be willful at least since the filing of the Original Complaint on July 13, 2021.

192. *First*, Defendants knew of the '893 patent at least since the filing and/or service of the Original Complaint in this action (*see* above at ¶ 165, incorporated by reference herein).

193. *Second*, after acquiring that knowledge, Defendants have continued to conduct the same activity that was accused of infringement of the '893 patent. As described above in ¶ 175, incorporated by reference herein, TrackThings asked Defendants what actions they took upon learning of the asserted patents, including the '893 patent, and Defendants readily admit that they took no action whatsoever. (Defendants' Response to Interrogatory No. 3.)

194. *Third*, in doing so, Defendants knew, or should have known, that their conduct amounted to infringement of the '893 patent and that the '893 patent is valid. As described in above at ¶ 177, incorporated by reference herein, TrackThings explained its infringement theory in the Original Complaint and in three rounds of Infringement Contentions. TrackThings has asked Defendants for its non-infringement positions, but Defendants did not substantively respond—instead Defendants simply listed the limitations from the claims and stated without factual bases that their products do not meet these limitations.

JURY DEMAND

195. TrackThings requests a trial by jury for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, TrackThings respectfully requests that the Court enter judgment against Defendants:

A. determining that Defendants have infringed, and continue to infringe, one or more claims of the '017 patent;

B. ordering Defendants to account for and pay to TrackThings all damages suffered by TrackThings as a consequence of Defendants' infringement of the '017 patent, together with pre and post judgment interest and costs as fixed by the Court;

C. ordering Defendants to account for and pay to TrackThings all ongoing royalties for Defendants' continuing infringement of the '017 patent;

D. ordering a permanent injunction prohibiting Defendants from further acts of infringement of the '017 patent;

E. declaring that Defendants' infringement of the '017 patent was and is willful and trebling TrackThings' damages under U.S.C. § 284 on that ground;

F. determining that Defendants have infringed, and continue to infringe, one or more claims of the '442 patent;

G. ordering Defendants to account for and pay to TrackThings all damages suffered by TrackThings as a consequence of Defendants' infringement of the '442 patent, together with pre and post judgment interest and costs as fixed by the Court;

H. ordering Defendants to account for and pay to TrackThings all ongoing royalties for Defendants' continuing infringement of the '442 patent;

I. ordering a permanent injunction prohibiting Defendants from further acts of infringement of the '442 patent;

J. declaring that Defendants' infringement of the '442 patent was and is willful and trebling TrackThings' damages under U.S.C. § 284 on that ground;

K. determining that Defendants have infringed, and continue to infringe, one or more claims of the '893 patent;

L. ordering Defendants to account for and pay to TrackThings all damages suffered by TrackThings as a consequence of Defendants' infringement of the '893 patent, together with pre and post judgment interest and costs as fixed by the Court;

M. ordering Defendants to account for and pay to TrackThings all ongoing royalties for Defendants' continuing infringement of the '893 patent;

N. ordering a permanent injunction prohibiting Defendants from further acts of infringement of the '893 patent;

O. declaring that Defendants' infringement of the '893 patent was and is willful and trebling TrackThings' damages under U.S.C. § 284 on that ground;

P. declaring that this case is exceptional and awarding TrackThings its costs and attorneys' fees in accordance with 35 U.S.C. § 285; and

Q. granting TrackThings such other and further relief as the Court may deem just and proper.

Dated: August 4, 2022

Respectfully Submitted,

/s/ Melissa R. Smith

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CERTIFICATE OF SERVICE

I hereby certify that on August 4, 2022, I caused a true and correct copy of the foregoing **FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT** to be filed and served electronically by means of the Court's CM/ECF system in accordance with Federal Rules of Civil Procedure and/or the Local Rules of this Court, upon the following counsel of record:

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