Travis E. Lynch (SBN 335684) lynch@rhmtrial.com ROZIER HARDT McDonough PLLC 659 Auburn Ave. NE, Suite 254 Atlanta, Georgia 30312 Telephone: (404) 564-1862 4 Attorney(s) for Plaintiff FLEET CONNECT SOLUTIONS, LLC 5 IN THE UNITED STATES DISTRICT COURT 6 FOR THE CENTRAL DISTRICT OF CALIFORNIA 7 FLEET CONNECT SOLUTIONS LLC, Case No. 8:25-cv-00053 8 Plaintiff, **COMPLAINT FOR PATENT** 9 **INFRINGEMENT** v. 10 **JURY TRIAL DEMANDED** EZURIO LLC (f/k/a LAIRD CONNECTIVITY LLC), 11 Defendant. 12 13 14 15 16 17 18 19 20 21 22 23 24 COZIER HARDI 25 CON 26 CON 27 CON

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COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Fleet Connect Solutions LLC ("FCS") files this Complaint against

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Ezurio LLC (f/k/a Laird Connectivity LLC) ("Ezurio," "Laird," or "Defendant") alleging, based on its own knowledge as to itself and its own actions, and based on

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information and belief as to all other matters, as follows:

NATURE OF THE ACTION

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This is a patent infringement action to stop Defendant's infringement of 1. the following United States Patents (collectively, the "Asserted Patents"), issued by

the United States Patent and Trademark Office ("USPTO"):

| 10 | | Patent No. | Reference |
|----|----|------------|--|
| 11 | 1. | 6,549,583 | https://image-ppubs.uspto.gov/dirsearch- public/print/downloadPdf/6549583 |
| 12 | 2. | 6,633,616 | https://image-ppubs.uspto.gov/dirsearch- public/print/downloadPdf/6633616 |
| 13 | 3. | 7,058,040 | https://image-ppubs.uspto.gov/dirsearch- public/print/downloadPdf/7058040 |
| 14 | 4. | 7,260,153 | https://image-ppubs.uspto.gov/dirsearch- public/print/downloadPdf/7260153 |
| 15 | 5. | 7,656,845 | https://image-ppubs.uspto.gov/dirsearch- public/print/downloadPdf/7656845 |
| 16 | 6. | 7,742,388 | https://image-ppubs.uspto.gov/dirsearch- public/print/downloadPdf/7742388 |
| 17 | 7. | 8,005,053 | https://image-ppubs.uspto.gov/dirsearch- public/print/downloadPdf/8005053 |

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2. Plaintiff seeks injunctive relief and monetary damages.

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PARTIES

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Plaintiff is a limited liability company formed under the laws of Texas 3. with a registered office address located in Austin, Texas.

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Upon information and belief, Defendant Ezurio is a corporation organized 4. and existing under the laws of Delaware with a principal place of business located at 50 South Main Street, Akron, Ohio 44308.

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Defendant Ezurio has an office and regular, established place of business 5. at 16450 Scientific, Irvine, California 92618.

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Ezurio can be served at its registered agent, Incorporating Services, Ltd., 6. at 145 Baker Street, Marion, Ohio, 43302.

JURISDICTION AND VENUE

- 7. FCS repeats and re-alleges the allegations in Paragraphs above as though fully set forth in their entirety.
- 8. This is an action for infringement of United States patents arising under 35 U.S.C. §§ 271, 281, and 284–85, among others. This Court has subject matter jurisdiction of the action under 28 U.S.C. § 1331 and § 1338(a).
- 9. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b)-(d) and 1400(b) because Ezurio resides in this district, has a place of business in this district, has conducted and continues to conduct business in this district, and has committed and continues to commit acts of infringement in this district.
- jurisdiction under due process due at least to Defendant's substantial business in this judicial district, including: (i) at least a portion of the infringements alleged herein; (ii) regularly transacting, doing, and/or soliciting business, engaging in other persistent courses of conduct, or deriving substantial revenue from goods and services provided to individuals in California and in this District; and (iii) having an interest in, using or possessing real property in California.
- 11. Specifically, Defendant intends to do and does business in, has committed acts of infringement in, and continues to commit acts of infringement in this District directly, through intermediaries, by contributing to and through its inducement of third parties, and offers its products or services, including those accused of infringement here, to customers and potential customers located in this District. Defendant markets, sells, and delivers accused products in this district, and has committed acts of infringement in this judicial district.
- 12. Defendant commits acts of infringement from this District, including, but not limited to, use of the Accused Products and inducement of third parties to use the Accused Products.

THE ACCUSED PRODUCTS

- 13. FCS repeats and re-alleges the allegations in Paragraphs above as though fully set forth in their entirety.
- or more computing devices, including, but not limited to, the SonaTM NX611 WiFi 6 + Bluetooth® 5.3 Module; SonaTM IF573 WiFi 6E + Bluetooth® 5.4 Module; SterlingTM-LWB5+ WiFi 5 + Bluetooth 5.2 Module / USB Adapter; SterlingTM-LWB+ WiFi 4 and Bluetooth 5.2 Modules; 60-SIPT Bluetooth and WiFi Module; SentriusTM MG100 Gateway with LTE-M/NB-IoT and Bluetooth 5; Sentrius IG60-BL654 and IG60-BL654-LTE Wireless IoT Gateway; Nitrogen8M Plus SMARC; Summit SOM 8M Plus System-on-Module WiFi 5 + Bluetooth 5.3; 60 Series SOM with WiFi 802.11ac and Bluetooth 5.1; Nitrogen8M Mini SBC; Nitrogen8M SBC; FlexMIMO / FlexMIMO 6E MIMO Internal Antenna; and Revie Flex Series Cellular Antennas, and any other devices and hardware, software, and functionality that comprise substantially similar functionality (collectively, the "Accused Products").
- 15. On information and belief, the Accused Products perform wireless communications and methods associated with performing and/or implementing wireless communications including, but not limited to, wireless communications and methods pursuant to various protocols and implementations, including, but not limited to, Bluetooth, IEEE 802.11, and LTE protocols and various subsections thereof, including, but not limited to, Bluetooth 5, 5.1, 5.2, 5.3, and 5.4 802.11ac, 802.11b, and 802.11n.
- 16. On information and belief, the wireless communications perform and/or implemented by the Accused Products, among other things, transmit data over various media, compute time slot channels, generate packets for network transmissions, perform or cause to be performed error estimation in orthogonal frequency division multiplexed ("OFDM") receivers, and various methods of

- 17. Defendant was notified that the Accused Products infringe the Asserted Patents by a letter in February of 2024.
- 18. For these reasons and the additional reasons detailed below, the Accused Products practice at least one claim of each of the Asserted Patents.

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 6,549,583

- 19. FCS repeats and re-alleges the allegations in Paragraphs above as though fully set forth in their entirety. For purposes of this Count I, the term "Accused Products" means the SonaTM NX611 WiFi 6 + Bluetooth® 5.3 Module; SonaTM IF573 WiFi 6E + Bluetooth® 5.4 Module; SterlingTM-LWB5+ WiFi 5 + Bluetooth 5.2 Module / USB Adapter; 60-SIPT Bluetooth and WiFi Module; SentriusTM MG100 Gateway with LTE-M/NB-IoT and Bluetooth 5; Sentrius IG60-BL654 and IG60-BL654-LTE Wireless IoT Gateway; Nitrogen8M Plus SMARC; Summit SOM 8M Plus System-on-Module WiFi 5 + Bluetooth 5.3; 60 Series SOM with WiFi 802.11ac and Bluetooth 5.1; Nitrogen8M Mini SBC; Nitrogen8M SBC; FlexMIMO / FlexMIMO 6E MIMO Internal Antenna; and Revie Flex Series Cellular Antennas, and any other devices and hardware, software, and functionality that comprise substantially similar functionality.
- 20. The USPTO duly issued U.S. Patent No. 6,549,583 (the "'583 patent") on April 15, 2003, after full and fair examination of Application No. 09/790,429 which was filed February 21, 2001. The '583 patent is entitled "Optimum Phase Error Metric for OFDM Pilot Tone Tracking in Wireless LAN."
- 21. FCS owns all substantial rights, interest, and title in and to the '583 patent, including the sole and exclusive right to prosecute this action and enforce the '583 patent against infringers and to collect damages for all relevant times.
- 22. The claims of the '583 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed

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- 23. The written description of the '583 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.
- 24. FCS or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '583 patent.
- 25. Defendant has directly infringed the claims of the '583 patent by manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products. For instance, Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '583 patent. As just one example of infringement, Defendant, using the Accused Products, performs a method of pilot phase error estimation in an orthogonal frequency division multiplexed (OFDM) receiver. The method includes determining pilot reference points corresponding to a plurality of pilots of an OFDM preamble waveform; and estimating an aggregate phase error of a subsequent OFDM data symbol relative to the pilot reference points using complex signal measurements corresponding to each of the plurality of pilots of the subsequent OFDM data symbol and the pilot reference points; wherein the estimating step comprises performing a maximum likelihoodbased estimation using the complex signal measurements corresponding to each of the plurality of pilots of the subsequent OFDM data symbol and the pilot reference points. See '583 Evidence of Use Charts, attached hereto as **Exhibit A**.
- 26. FCS has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to FCS in an amount that compensates it for such infringements, which by law cannot be less than a reasonable royalty,

together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 6,633,616

- 27. FCS repeats and re-alleges the allegations in Paragraphs above as though fully set forth in their entirety. For purposes of this Count II, the term "Accused Products" means the SonaTM NX611 WiFi 6 + Bluetooth® 5.3 Module; SonaTM IF573 WiFi 6E + Bluetooth® 5.4 Module; SterlingTM-LWB5+ WiFi 5 + Bluetooth 5.2 Module / USB Adapter; 60-SIPT Bluetooth and WiFi Module; SentriusTM MG100 Gateway with LTE-M/NB-IoT and Bluetooth 5; Sentrius IG60-BL654 and IG60-BL654-LTE Wireless IoT Gateway; Nitrogen8M Plus SMARC; Summit SOM 8M Plus System-on-Module WiFi 5 + Bluetooth 5.3; 60 Series SOM with WiFi 802.11ac and Bluetooth 5.1; Nitrogen8M Mini SBC; Nitrogen8M SBC; FlexMIMO / FlexMIMO 6E MIMO Internal Antenna; and Revie Flex Series Cellular Antennas, and any other devices and hardware, software, and functionality that comprise substantially similar functionality.
- 28. The USPTO duly issued U.S. Patent No. 6,633,616 (the "'616 patent") on October 14, 2003, after full and fair examination of Application No. 09/935,081 which was filed August 21, 2001. The '616 patent is entitled "OFDM Pilot Tone Tracking for Wireless LAN."
- 29. FCS owns all substantial rights, interest, and title in and to the '616 patent, including the sole and exclusive right to prosecute this action and enforce the '616 patent against infringers and to collect damages for all relevant times.
- 30. The claims of the '616 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting error estimation methods.
- 31. The written description of the '616 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim

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- 32. FCS or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '616 patent.
- Defendant has directly infringed the claims of the '616 patent by 33. manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products. For instance, Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 12 of the '616 patent. As just one example of infringement, Defendant, using the Accused Products, performs a method of pilot phase error estimation in an orthogonal frequency division multiplexed (OFDM) receiver. The method includes determining pilot reference points corresponding to a plurality of pilots of an OFDM preamble waveform; processing, in a parallel path to the determining step, the OFDM preamble waveform with a fast Fourier transform; determining a phase error estimate of a subsequent OFDM symbol relative to the pilot reference points; and processing, in the parallel path to the determining step, the subsequent OFDM symbol with the fast Fourier transform; wherein the determining the phase error estimate step is completed prior to the completion of the processing of the subsequent OFDM symbol with the fast Fourier transform in the parallel path. See '616 Evidence of Use Charts attached hereto as Exhibit B.
- 34. FCS has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to FCS in an amount that compensates it for such infringements, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT III: INFRINGEMENT OF U.S. PATENT NO. 7,058,040

35. FCS repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety. For purposes of this Count III, the term

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"Accused Products" means the SonaTM NX611 - WiFi 6 + Bluetooth® 5.3 Module; SonaTM IF573 - WiFi 6E + Bluetooth® 5.4 Module; SterlingTM-LWB+ WiFi 4 and Bluetooth 5.2 Modules; Sentrius[™] MG100 Gateway with LTE-M/NB-IoT and Bluetooth 5; Sentrius IG60-BL654 and IG60-BL654-LTE Wireless IoT Gateway; and Summit SOM 8M Plus System-on-Module - WiFi 5 + Bluetooth 5.3, and any other devices and hardware, software, and functionality that comprise substantially similar functionality.

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- 36. The USPTO duly issued U.S. Patent No. 7,058,040 (the "'040 patent") on June 6, 2006, after full and fair examination of Application No. 09/962,718 which was filed September 21, 2001. The '040 patent is entitled "Channel Interference Reduction."
- 37. FCS owns all substantial rights, interest, and title in and to the '040 patent, including the sole and exclusive right to prosecute this action and enforce the '040 patent against infringers and to collect damages for all relevant times.
- The claims of the '040 patent are not directed to an abstract idea and are 38. not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting data transmission methods.
- 39. The written description of the '040 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.
- 40. FCS or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '040 patent.
- Defendant has directly infringed and continued to directly infringe the 41. claims of the '040 patent through the end of its term by manufacturing, providing,

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supplying, using, distributing, selling, or offering to sell the Accused Products. For instance, Defendant has directly infringed and continued to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '040 patent through the end of its term. As just one example of infringement, Defendant, using the Accused Products, performed a method for data transmission over first and second media that overlap in frequency. The method included computing one or more time division multiple access (TDMA) time-slot channels to be shared between the first and second media for data transmission; allocating one or more time-slot channels to the first medium for data transmission; allocating one or more of the remaining time-slot channels to the second medium for data transmission; and dynamically adjusting a number of timeslot channels assigned to one of the first and second media during the data transmission to remain within limits of a desired level of service. *See* '040 Evidence of Use Chart attached hereto as **Exhibit C**.

42. Defendant has indirectly infringed and continued to indirectly infringe the '040 patent through the end of its term by inducing others to directly infringe the '040 patent. Defendant has induced and continued to induce customers and endusers, including, but not limited to, Defendant's customers, employees, partners, or contractors, to directly infringe, either literally or under the doctrine of equivalents, the '040 patent by providing or requiring use of the Accused Products. Defendant has taken active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '040 patent, including, for example, claim 1. Such steps by Defendant has included, among other things, advising or directing customers, personnel, contractors, or end-users to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide users to use the Accused Products in an infringing manner. Defendant had been performing these steps, which constitute induced infringement with the knowledge of the '040 patent and

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with the knowledge that the induced acts constitute infringement. Defendant has been aware that the normal and customary use of the Accused Products by others would infringe the '040 patent. Defendant's inducement is ongoing.

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- Defendant has indirectly infringed and continued to indirectly infringe by 43. contributing to the infringement of the '040 patent through the end of its term. Defendant has contributed and continued to contribute to the direct infringement of the '040 patent by its customers, personnel, and contractors. The Accused Products have special features that are specially designed to be used in an infringing way and that have no substantial uses other than ones that infringe one or more claims of the '040 patent, including, for example, claim 1. The special features constitute a material part of the invention of one or more of the claims of the '040 patent and are not staple articles of commerce suitable for substantial non-infringing use. Defendant's contributory infringement of the '040 patent was ongoing through the end of its term.
- Defendant had knowledge of its infringement of the '040 patent at least as 44. of February of 2024.
- Furthermore, on information and belief, Defendant has a policy or practice of not reviewing the patents of others, including instructing its employees to not review the patents of others, and thus have been willfully blind of FCS's patent rights.
- 46. Defendant's actions were at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.
- 47. Defendant's infringement of the '040 patent is, has been, and continued to be willful, intentional, deliberate, or in conscious disregard of FCS's rights under the '040 patent through the end of its term.
- FCS has been damaged as a result of the infringing conduct by Defendant 48. alleged above. Thus, Defendant is liable to FCS in an amount that compensates it

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for such infringements, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

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COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 7,260,153

- FCS repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety. For purposes of this Count IV, the term "Accused Products" means the SonaTM NX611 - WiFi 6 + Bluetooth® 5.3 Module; SonaTM IF573 - WiFi 6E + Bluetooth® 5.4 Module; SterlingTM-LWB+ WiFi 4 and Bluetooth 5.2 Modules; Sentrius[™] MG100 Gateway with LTE-M/NB-IoT and Bluetooth 5; Sentrius IG60-BL654 and IG60-BL654-LTE Wireless IoT Gateway; Summit SOM 8M Plus System-on-Module - WiFi 5 + Bluetooth 5.3; FlexMIMO / FlexMIMO 6E MIMO Internal Antenna; and Revie Flex Series Cellular Antennas, and any other devices and hardware, software, and functionality that comprise substantially similar functionality.
- 50. The USPTO duly issued U.S. Patent No. 7,260,153 (the "'153 patent") on August 21, 2007, after full and fair examination of Application No. 10/423,447, which was filed on April 28, 2003. The '153 patent is entitled "Multi Input Multi Output Wireless Communication Method and Apparatus Providing Extended Range and Extended Rate Across Imperfectly Estimated Channels."
- FCS owns all substantial rights, interest, and title in and to the '153 patent, 51. including the sole and exclusive right to prosecute this action and enforce the '153 patent against infringers and to collect damages for all relevant times.
- 52. The claims of the '153 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of voice and data communications systems.
- The written description of the '153 patent describes in technical detail 53. each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim

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- 54. Defendant has directly infringed and continues to directly infringe the claims of the '153 patent by importing, selling, manufacturing, offering to sell, using, providing, supplying, or distributing the Accused Products. For instance, Defendant has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '153 patent. As just one example of infringement, Defendant, using the Accused Products, performs a method for evaluating a channel of a multiple-input multiple-output ("MIMO") wireless communication system allowing two or more communication devices with multiple radiating elements to transmit parallel data sub-streams which defines a channel matrix metric of cross-talk signal-to-noise ("SNR") for the subs-streams, estimates the channel matrix metric, performs a singular value decomposition ("SVD") of the channel matrix metric estimate to calculate estimated channel singular values, and using the channel matrix metric and estimated channel singular values to calculate a crosstalk measure for the sub-streams. See '153 Evidence of Use Charts attached hereto as **Exhibit D**.
- 55. Defendant has also indirectly infringed and continues to indirectly infringe the '153 patent by inducing others to directly infringe the '153 patent. Defendant has induced distributors and end-users, including, but not limited to, Defendant's employees, partners, contractors, or customers, to directly infringe, either literally or under the doctrine of equivalents, the '153 patent by providing or requiring use of the Accused Products. Defendant took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '153 patent, including, for example, claim 1 of the '153 patent. Such steps by Defendant include, among other things, advising or directing personnel, contractors, or end-users to use the Accused Products in an infringing manner; advertising and

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- 56. Defendant has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '153 patent. Defendant has contributed to the direct infringement of the '153 patent by its personnel, contractors, distributors, and customers. The Accused Products have special features that are specially designed to be used in an infringing way and that have no substantial uses other than ones that infringe one or more claims of the '153 patent, including, for example, claim 1 of the '153 patent. The special features constitute a material part of the invention of one or more of the claims of the '153 patent and are not staple articles of commerce suitable for substantial non-infringing use. contributory infringement is ongoing.
- Defendant had knowledge of its infringement of the '153 patent at least as 57. of February of 2024.
- 58. Furthermore, on information and belief, Defendant has a policy or practice of not reviewing the patents of others, including instructing its employees to not review the patents of others, and thus has been willfully blind of FCS's patent rights.
- Defendant's actions are at least objectively reckless as to the risk of 59. infringing a valid patent and this objective risk was either known or should have been known by Defendant.
- 60. Defendant's direct infringement of the '153 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of FCS's rights under the patent.

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61. FCS or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '153 patent.

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- FCS has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to FCS in an amount that compensates it for such infringements, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
- 63. FCS has suffered irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. FCS has and will continue to suffer this harm by virtue of Defendant's infringement of the '153 patent. Defendant's actions have interfered with and will interfere with FCS's ability to license technology. The balance of hardships favors FCS's ability to commercialize its own ideas and technology. The public interest in allowing FCS to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

COUNT V: INFRINGEMENT OF U.S. PATENT NO. 7,656,845

- FCS repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety. For purposes of this Count V, the term "Accused Products" means the SonaTM NX611 - WiFi 6 + Bluetooth® 5.3 Module; SonaTM IF573 - WiFi 6E + Bluetooth® 5.4 Module; SterlingTM-LWB+ WiFi 4 and Bluetooth 5.2 Modules; Sentrius™ MG100 Gateway with LTE-M/NB-IoT and Bluetooth 5; Sentrius IG60-BL654 and IG60-BL654-LTE Wireless IoT Gateway; and Summit SOM 8M Plus System-on-Module - WiFi 5 + Bluetooth 5.3, and any other devices and hardware, software, and functionality that comprise substantially similar functionality.
- 65. The USPTO duly issued U.S. Patent No. 7,656,845 (the "'845 patent") on February 2, 2010 after full and fair examination of Application No. 11/402,172 which was filed on April 11, 2006. The '845 patent is entitled "Channel Interference

- 66. FCS owns all substantial rights, interest, and title in and to the '845 patent, including the sole and exclusive right to prosecute this action and enforce the '845 patent against infringers and to collect damages for all relevant times.
- 67. The claims of the '845 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods of wireless communication with a mobile unit.
- 68. The written description of the '845 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.
- 69. Defendant has directly infringed and continued to directly infringe the claims of the '845 patent through the end of its term by importing, selling, manufacturing, offering to sell, using, providing, supplying, or distributing the Accused Products. For instance, Defendant has directly infringed and continued to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '845 patent through the end of its term. As just one example of infringement, the Accused Products used by Defendant provide a system comprising a processor, a first transceiver configured to communicate *via* a first medium, a second transceiver configured to communicate *via* a second medium, wherein at least one of the first transceiver and the second transceiver is configured to retry transmission of a packet at a lower rate if a prior transmission of the packet is not acknowledged, an allocation unit configured to dynamically allocate data channels to one of the first medium and the second medium based upon a desired level of service. *See* '845 Evidence of Use Chart attached hereto as **Exhibit E**.

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70. Defendant has also indirectly infringed and continued to indirectly infringe the '845 patent the end of its term by inducing others to directly infringe the '845 patent. Defendant has induced distributors and end-users, including, but not limited to, Defendant's employees, partners, contractors, or customers, to directly infringe, either literally or under the doctrine of equivalents, the '845 patent by providing or requiring use of the Accused Products. Defendant took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '845 patent, including, for example, claim 1 of the '845 patent. Such steps by Defendant include, among other things, advising or directing personnel, contractors, or end-users to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide users to use the Accused Products in an infringing manner. Defendant performed these steps, which constitute induced infringement with the knowledge of the '845 patent and with the knowledge that the induced acts constitute infringement. Defendant is aware that the normal and customary use of the Accused Products by others would infringe the '845 patent. Defendant's inducement is ongoing.

Defendant has also indirectly infringed and continued to indirectly 71. infringe by contributing to the infringement of the '845 patent through the end of its term. Defendant has contributed to the direct infringement of the '845 patent by its personnel, contractors, distributors, and customers. The Accused Products have special features that are specially designed to be used in an infringing way and that have no substantial uses other than ones that infringe one or more claims of the '845' patent, including, for example, claim 1 of the '845 patent. The special features constitute a material part of the invention of one or more of the claims of the '845 patent and are not staple articles of commerce suitable for substantial non-infringing use. Defendant's contributory infringement of the 845 patent was ongoing through

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the end of its term.

- Defendant had knowledge of its infringement of the '845 patent at least as of February of 2024.
- Furthermore, on information and belief, Defendant has a policy or practice 73. of not reviewing the patents of others, including instructing its employees to not review the patents of others, and thus has been willfully blind of FCS's patent rights.
- 74. Defendant's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.
- 75. Defendant's direct infringement of the '845 patent is, has been, and continued to be willful, intentional, deliberate, or in conscious disregard of FCS's rights under the patent '845 patent through the end of its term.
- FCS or its predecessors-in-interest have satisfied all statutory obligations 76. required to collect pre-filing damages for the full period allowed by law for infringement of the '845 patent.
- FCS has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to FCS in an amount that compensates it for such infringements, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT VI: INFRINGEMENT OF U.S. PATENT NO. 7,742,388

FCS repeats and re-alleges the allegations in the Paragraphs above as 78. though fully set forth in their entirety. For purposes of this Count VI, the term "Accused Products" means the SonaTM NX611 - WiFi 6 + Bluetooth® 5.3 Module; SonaTM IF573 - WiFi 6E + Bluetooth® 5.4 Module; SterlingTM-LWB+ WiFi 4 and Bluetooth 5.2 Modules; Sentrius™ MG100 Gateway with LTE-M/NB-IoT and Bluetooth 5; Sentrius IG60-BL654 and IG60-BL654-LTE Wireless IoT Gateway; Summit SOM 8M Plus System-on-Module - WiFi 5 + Bluetooth 5.3; FlexMIMO / FlexMIMO 6E MIMO Internal Antenna; and Revie Flex Series Cellular Antennas,

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- and any other devices and hardware, software, and functionality that comprise substantially similar functionality
- 79. The USPTO duly issued U.S. Patent No. 7,742,388 (the "'388 patent") on June 22, 2010, after full and fair examination of Application No. 11/185,665 which was filed July 20, 2005. The '388 patent is entitled "Packet Generation Systems and Methods."
- 80. FCS owns all substantial rights, interest, and title in and to the '388 patent, including the sole and exclusive right to prosecute this action and enforce the '388 patent against infringers and to collect damages for all relevant times.
- 81. The claims of the '388 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods of generating packets in a digital communications system.
- 82. The written description of the '388 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.
- 83. FCS or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '388 patent.
- 84. Defendant has directly infringed and continues to directly infringe the claims of the '388 patent by manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products. For instance, Defendant has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '388 patent. As just one example of infringement, Defendant performs a method including generating a

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packet with a size corresponding to a protocol used for a network transmission, wherein the packet comprises a preamble having a first training symbol and a second training symbol. The method further includes increasing the size of the packet by adding subcarriers to the second training symbol of the packet to produce an extended packet, wherein a quantity of subcarriers of the second training symbol is greater than a quantity of subcarriers of the first training symbol; and transmitting the extended packet from an antenna. See '388 Evidence of Use Charts attached hereto as Exhibit F.

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85. Defendant has indirectly infringed and continues to indirectly infringe the '388 patent by inducing others to directly infringe the '388 patent. Defendant has induced and continue to induce customers and end-users, including, but not limited to, Defendant's customers, employees, partners, or contractors, to directly infringe, either literally or under the doctrine of equivalents, the '388 patent by providing or requiring use of the Accused Products. Defendant has taken active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '388 patent, including, for example, claim 1. Such steps by Defendant has included, among other things, advising or directing customers, personnel, contractors, or endusers to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide users to use the Accused Products in an infringing manner. Defendant has been performing these steps, which constitute induced infringement with the knowledge of the '388 patent and with the knowledge that the induced acts constitute infringement. Defendant has been aware that the normal and customary use of the Accused Products by others would infringe the '388 patent. Defendant's inducement is ongoing.

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Defendant had knowledge of its infringement of the '388 patent at least as 87. of February of 2024.

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- 88. Furthermore, on information and belief, Defendant has a policy or practice of not reviewing the patents of others, including instructing its employees to not review the patents of others, and thus have been willfully blind of FCS's patent rights.
- 89. Defendant's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.
- 90. Defendant's infringement of the '388 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of FCS's rights under the patent.
- 91. FCS has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to FCS in an amount that compensates it for such infringements, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
- 92. FCS has suffered irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. FCS has and will continue to suffer this harm by virtue of Defendant's infringement of the '388 patent. Defendant's actions have interfered with and will interfere with FCS's ability to

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license technology. The balance of hardships favors FCS's ability to commercialize its own ideas and technology. The public interest in allowing FCS to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

COUNT VII: <u>INFRINGEMENT OF U.S. PATENT NO. 8,005,053</u>

- FCS repeats and re-alleges the allegations in the Paragraphs above as 93. though fully set forth in their entirety. For purposes of this Count VII, the term "Accused Products" means the SonaTM NX611 - WiFi 6 + Bluetooth® 5.3 Module; SonaTM IF573 - WiFi 6E + Bluetooth® 5.4 Module; SterlingTM-LWB+ WiFi 4 and Bluetooth 5.2 Modules; Sentrius™ MG100 Gateway with LTE-M/NB-IoT and Bluetooth 5; Sentrius IG60-BL654 and IG60-BL654-LTE Wireless IoT Gateway; and Summit SOM 8M Plus System-on-Module - WiFi 5 + Bluetooth 5.3, and any other devices and hardware, software, and functionality that comprise substantially similar functionality.
- The USPTO duly issued U.S. Patent No. 8,005,053 (the "'053 patent") on 94. August 23, 2011, after full and fair examination of Application No. 12/696,760, which was filed on January 29, 2010. The '053 patent is entitled "Channel Interference Reduction."
- 95. FCS owns all substantial rights, interest, and title in and to the '053 patent, including the sole and exclusive right to prosecute this action and enforce the '053' patent against infringers and to collect damages for all relevant times.
- 96. The claims of the '053 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of voice and data communications systems.
- 97. The written description of the '053 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim

- 98. Defendant has directly infringed the claims of the '053 patent by importing, selling, manufacturing, offering to sell, using, providing, supplying, or distributing the Accused Products. For instance, Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '053 patent. As just one example of infringement, Defendant performs a method comprising a communication device storing data encoded for a plurality of different wireless protocols, the communication device including a plurality of wireless transceivers, each of which is configured to transmit data according to a corresponding one of the plurality of different wireless protocols where the communication device selects one of the plurality of different wireless protocols and encodes data of an unselected one of the plurality of different wireless protocols into the selected wireless protocol, and transmits the encoded data using the one of the plurality of wireless transceivers corresponding to the selected wireless protocol. *See* '053 Evidence of Use Charts attached hereto as **Exhibit G**.
- 99. FCS or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '053 patent.
- 100. FCS has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to FCS in an amount that compensates it for such infringements, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

JURY DEMAND

101. FCS hereby requests a trial by jury on all issues so triable by right.

PRAYER FOR RELIEF

102. FCS requests that the Court find in its favor and against Defendant, and that the Court grant FCS the following relief:

- a. Judgment that one or more claims of each of the Asserted Patents has been infringed, either literally or under the doctrine of equivalents, by Defendant or others acting in concert therewith;
- b. A permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in concert therewith from infringement of the '388 patent; or, in the alternative, an award of a reasonable ongoing royalty for future infringement of the Asserted Patents by such entities;
- c. Judgment that Defendant account for and pay to FCS all damages to and costs incurred by FCS because of Defendant's infringing activities and other conduct complained of herein;
- d. Judgment that Defendant's infringements of the '040 patent, the '153 patent, the '845 patent, and the '388 patent during their lifetimes be found willful, and that the Court award treble damages for the period of such willful infringement pursuant to 35 U.S.C. § 284;
- e. Pre-judgment and post-judgment interest on the damages caused by Defendant's infringing activities and other conduct complained of herein;
- f. That this Court declare this an exceptional case and award FCS its reasonable attorneys' fees and costs in accordance with 35 U.S.C. § 285; and
- g. All other and further relief as the Court may deem just and proper under the circumstances.

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