С	ase 5:24-cv-00376-KK-SP Document 103 #:4515					
1 2 3 4 5 6 7 8 9	#:4515  Steven W. Ritcheson (SBN 174062)     Email: swritcheson@insightplc.com  INSIGHT, PLC  578 Washington Blvd. #503     Marina del Rey, California 90292     Telephone: (424) 289-9191  Travis E. Lynch (SBN 335684)     Email: lynch@rhmtrial.com  ROZIER HARDT MCDONOUGH PLLC  659 Auburn Avenue NE, Unit 254     Atlanta, Georgia 30312     Telephone: (404) 564-1862					
10 11	For Plaintiff FLEET CONNECT SOLUTIONS LLC (additional attorneys listed on signature page)					
12 13 14	UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA					
15 16	FLEET CONNECT SOLUTIONS LLC,	N DIVISION  Case No. 5:24-cv-00376-KK-SP				
17 18 19	Plaintiff, v.	FIRST AMENDED COMPLAINT AGAINST C.R. ENGLAND, INC. FOR PATENT INFRINGEMENT				
20 21 22	C.R. ENGLAND, INC., Defendant,	JURY TRIAL DEMANDED				
23 24	and					
<ul><li>25</li><li>26</li><li>27</li></ul>	ORBCOMM, INC.,  Intervenor-Defendant.					
27   28	AND RELATED CROSS-ACTIONS					

Plaintiff Fleet Connect Solutions LLC ("FCS" or "Plaintiff") files this First Amended Complaint against C.R. England, Inc. ("C.R. England") alleging, based on its own knowledge as to itself and its own actions, and based on information and belief as to all other matters, as follows:

### NATURE OF THE ACTION

1. This is a patent infringement action to stop C.R. England's infringement of the following United States Patents (collectively, the "<u>Asserted Patents</u>"):

8	U.S. Patent No.	Title	Available At:
9	1. 6,429,810	Integrated Air	https://image-ppubs.uspto.gov/dirsearch-
		Logistics System	public/print/downloadPdf/6429810
10			
11			https://patentimages.storage.googleapis.com/ 58/e0/e4/b2d9d7c23e0cfc/US6429810.pdf
12	2. 7,058,040	Channel	https://image-ppubs.uspto.gov/dirsearch-
13	2. 7,020,010	Interference	public/print/downloadPdf/7058040
		Reduction	*
14			https://patentimages.storage.googleapis.com/
15			fc/bf/89/0b41ddffc31091/US7058040.pdf
16	3. 7,260,153	Multi Input Multi	https://image-ppubs.uspto.gov/dirsearch-
		Output Wireless Communication	public/print/downloadPdf/7260153
17		Method and	https://patentimages.storage.googleapis.com/
18		Apparatus	6e/c6/0a/a31c81abd31a94/US7260153B2.pdf
19		Providing	ovice and the received and rece
		Extended Range	
20		and Extended Rate	
21		Across Imperfectly	
22		Estimated	
22	4. 7,596,391	Channels System and	https://image-ppubs.uspto.gov/dirsearch-
23	4. 7,370,371	Method for	public/print/downloadPdf/7596391
24		Wireless	poetro, printing de mouder de rey eeu r
25		Communication	https://patentimages.storage.googleapis.com/
26		Between a Vehicle	54/84/c7/4c623f3cfde876/US7596391.pdf
		and a Mobile Unit	
27	5. 7,656,845	Channel	https://image-ppubs.uspto.gov/dirsearch-
28		Interference Reduction	public/print/downloadPdf/7656845
		Reduction	

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1				https://patentimages.storage.googleapis.com/
		12 200	D 1 . G	75/e5/58/a3b9dbb61c1558/US7656845.pdf
2	6. 7,74	12,388	Packet Generation	https://image-ppubs.uspto.gov/dirsearch-
3			Systems and Methods	public/print/downloadPdf/7742388
4			Wiemous	https://patentimages.storage.googleapis.com/
5				d6/71/bf/490092e646e7fa/US7742388.pdf
	7. 6,54	19,583	Optimum Phase	https://image-ppubs.uspto.gov/dirsearch-
6			Error Metric For	public/print/downloadPdf/20020150168
7			OFDM Pilot Tone	
8			Tracking in	https://patentimages.storage.googleapis.com/
	8. 6,63	23 616	Wireless LAN OFDM Pilot Tone	92/c5/4e/7ff508fe739eea/US6549583.pdf https://image-ppubs.uspto.gov/dirsearch-
9	0. 0,02	55,010	Tracking For	public/print/downloadPdf/20020159533
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				2d/b4/52/2a37e3f9bca3cf/US6633616.pdf
12	9. 7,20	06,837	Intelligent Trip	https://image-ppubs.uspto.gov/dirsearch-
13			Status Notification	public/print/downloadPdf/20040088107
14				https://patantima.gog.gtorago.gog.glasnig.gom/
15				https://patentimages.storage.googleapis.com/ e2/7b/8d/f47eb0a1b54c46/US7206837.pdf
	10. 7,	741,968	System And	https://image-ppubs.uspto.gov/dirsearch-
16	,	, , , , , ,	Method For	public/print/downloadPdf/7741968
17			Navigation	
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			Individuals In A	9d/5b/13/ec3777bf94c07c/US7741968.pdf
19	11. 7,	747,291	Group Wireless	https://imaga.ppubs.uspto.gov/dirsograh
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24			Interference	public/print/downloadPdf/8005053
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FIRST AMENDED COMPLAINT AGAINST C.R. ENGLAND, INC. FOR PATENT INFRINGEMENT Page  $\mid 2$ 

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			Devices	

2. Plaintiff seeks injunctive relief and monetary damages.

#### **PARTIES**

- 3. Plaintiff is a limited liability company formed under the laws of Texas with its registered office address located in Austin, Texas (Travis County).
- 4. On information and belief, C.R. England is a corporation organized under the laws of the State of Utah with its principal place of business located at 4701 W 2100 S., Salt Lake City, Utah 84120 (Salt Lake County).
- 5. C.R. England also maintains places of business in this District, including at least 2250 S. Riverside Avenue, Colton, California 92324 (San Bernardino County).
- 6. C.R. England may be served through its registered agent for service in California: CSC Lawyers Incorporating Service, 2710 Gateway Oaks Drive, Sacramento, California, 95833.
- 7. C.R. England may also be served through its registered agent for service in Utah: Corporation Service Company, 15 West South Temple, Suite 600, Salt Lake City, Utah 84101.

#### **JURISDICTION AND VENUE**

- 8. FCS repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.
- 9. This is an action for infringement of a United States patent 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).
- 10. Venue is proper against C.R. England in this District pursuant to 28 U.S.C. § 1400(b) and 1391(c) because it has maintained established and regular places of business in this District and has committed acts of patent infringement in the District. See *In re: Cray Inc.*, 871 F.3d 1355, 1362-1363 (Fed. Cir. 2017).
- 11. C.R. England is subject to this Court's specific and general personal jurisdiction under due process and/or the California Long Arm Statute due at least to C.R. England's substantial business in this judicial district, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing 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.
- 12. Specifically, C.R. England intends to do and does business in, and has committed acts of infringement in this District directly and through intermediaries, and offered its products or services, including those accused of infringement here, to customers and potential customers located in California, including in this District.
- 13. C.R. England maintains a regular and established place of business in this District, including, but not limited to, a maintenance location and C.R. England Premier Trucking School located at the following address: 2250 S. Riverside Avenue, Colton, California 92324.
- 14. C.R. England has committed acts of infringement from this district, including, but not limited to, use of the Accused Products.

#### THE ACCUSED PRODUCTS

- 15. FCS repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.
- 16. Based upon public information, C.R. England owns, operates, advertises, and/or controls products and services that provide and/or utilize Accused Products manufactured by ORBCOMM, Inc. ("ORBCOMM").
- 17. Based upon public information, C.R. England uses, causes to be used, provides, supplies, or distributes one or more fleet management platform and tracking solutions utilizing infringing systems and/or methods manufactured by ORBCOMM, including, but not limited to, including (1) the GT1200 Series, (2) CT1000 Container, (3) CT1000 Transportation, (4) CT3000, (5) CT3500, (6) PT6000, (7) PT7000, (8) GT1020, (9) GT1030, (10) GT1030HE, (11) IS400, (12) SC1000; (13) ORBCOMM trailer tracking devices; (14) BT 320; (15) ELD Devices such as ELD tablets and BT 500; (16) the PRO-400; (17) Smart Dashcams, such as the FM 6510; (18) ORBCOMM Telematics Devices such as the FM5000, (19) ORBCOMM Trailer Tracking Solutions, (20) ORBCOMM Platform, (21) ORBCOMM Fleet Management Software/Application, such as Alert, Report, Control (ARC) Terminal App and Automatic Vehicle Location (AVL) Terminal App, (22) ORBCOMM Web Applications, such as AssetWatch, CargoWatch Secure, Drivewyze, FleetEdge, FSMA Compliance Solution, and ELD Truck Management Software, (23) ORBCOMM Enterprise Application such as DeviceCloud and ORBCOMM Connect, (24) Two-Way Reefer Trailer Monitoring and Control, (25) other substantially similar products and services offered in the past or the future, and (26) all of the prior models, iterations, releases, versions, generations, and prototypes of the foregoing, along with any associated hardware, software, applications, and functionality associated with those products and solutions. (collectively, the "Accused Products").

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See, e.g., https://blog.orbcomm.com/c-r-england-keeps-its-cool-with-state-of-the-art-trailer-tracking/ and

- 18. C.R. England uses the Accused Products to 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, 802.11ac, 802.11b, and 802.11n.
- 19. 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 processing OFDM symbols.
- 20. C.R. England, using the Accused Products, also tracks, analyzes, and reports vehicle maintenance needs and driver warnings associated with a vehicle, tracks or causes to be tracked vehicle locations, and allows for communication between a system administrator and a remote unit to communicate, *e.g.*, advisory notifications.
- 21. 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. 6,429,810

- 22. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 23. The USPTO duly issued U.S. Patent No. 6,429,810 (hereinafter, the "'810 patent") on August 6, 2002, after a full and fair examination of Application No. 09/774,547, which was filed January 31, 2001.
- 24. FCS owns all substantial rights, interest, and title in and to the '810 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.

https://www.orbcomm.com/PDF/casestudies/cr\_england\_cs.pdf, both last accessed February 8, 2024.

- 25. The claims of the '810 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 logistics and tracking systems.
- 26. The written description of the '810 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.
- 27. 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 '810 patent.
- 28. C.R. England has directly infringed and continues to directly infringe the '810 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 29. C.R. England has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '810 patent. For example, C.R. England performed a method of providing container status information to a user. The method included attaching an electronic communications unit to a shipping container; generating a transaction identification code, wherein said transaction identification code is specific to said shipping container and specific to at least one user transaction; initiating a status inquiry utilizing said transaction identification code, wherein said user performs said initiating step; receiving said status inquiry by a ground communications system; transmitting said status inquiry to said electronic communications unit by said ground communication unit; transmitting said status information response by said electronic communications system by said electronic communications unit; and forwarding said status information response to said user by said ground communications system.

30. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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. 7,058,040

- 31. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 32. The USPTO duly issued U.S. Patent No. 7,058,040 (hereinafter, the "'040 patent") on June 6, 2006, after a full and fair examination of Application No. 09/962,718, which was filed September 21, 2001.
- 33. 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 said patent against infringers and to collect damages for all relevant times.
- 34. The claims of the '040 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 data transmission methods.
- 35. 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.
- 36. 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.
- 37. C.R. England has directly infringed and continues to directly infringe the '040 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.

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- 38. C.R. England has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '040 patent. For example, C.R. England, using the Accused Products, performs a method for data transmission over first and second media that overlap in frequency. The method includes 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.
- 39. More specifically, and as just one example of infringement, C.R. England's conduct has comprised using the Accused Products to perform a method for data transmission over first and second media that overlap in frequency because the Accused Products communicate according to either the 3GPP TS 136.101, et seq. LTE protocol or the 802.11b and Bluetooth protocols, which involve transmission over first and second media that overlap in frequency when using the Accused Products. The Accused Products also communicate according to LTE (e.g., 3 GPP LTE) using different media, including a first and second media, which overlap in frequency when using the Accused Products. 3GPP TS 36.211 sets forth a resource grid structure for allocating transmission resources to 3G LTE systems. According to this twodimensional time and frequency grid structure, frequency channels are shared between different transceivers in time domain, by using time division ("TDM") slot channels. A unit time slot spanning a group of subcarriers (e.g., 12 adjacent subcarriers equivalent to 180KHz frequency) is referred to as a Resource Block ("RB") or Physical Resource Block ("PRB"). A resource block (a time and frequency unit) is the smallest bandwidth or unit of transmission resource that can be allocated to a user equipment ("UE") or transceiver. Further, each radio time frame (10ms in case of

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LTE) is divided into multiple sub-frames (1ms each), and each such sub-frame includes two time slots. 3GPP LTE follows OFDMA based multiplexing in resource allocation. Each media or UE/transceiver is allocated one or more (a group of) RBs/PRBs for data communication in uplink and/or downlink, i.e., each transceiver is allocated a fixed set of subcarriers over a period of time. A first transceiver communicates using its allocated frequency subcarriers (first medium), while a second transceiver uses its allocated subcarriers to communicate (second medium). A first and second media that are allocated RBs along the same time frame or sub-frame overlap in frequency. As just one example, the method includes (a) computing one or more time division multiple access ("TDMA") time-slot channels to be shared between the first and second media for data transmission, e.g., 802.15.2-2003 sets forth the mechanism for Alternating Wireless Medium Access ("AWMA") to reduce interference between 802.11 and 802.15 signals. In AWMA, the beacon period of an 802.11b frame is shared between first media (WLAN) and second media (WPAN) for data transmission; (b) allocating one or more time-slot channels to the first medium for data transmission, e.g., the Accused Products allocate a time-slot channel (WLAN interval to the first medium (802.11b) for data transmission); (c) allocating one or more of the remaining time-slot channels to the second medium for data transmission, e.g., the Accused Products allocate a time-slot channel (WPAN interval) to the second medium (802.15) for data transmission; and (d) dynamically adjusting a number of time-slot channels assigned to one of the first and second media during the data transmission to remain within limits of a desired level of service, e.g., the 802.11b beacon frame includes a Medium Sharing Element ("MSE") that defines the length of the time-slot channels (WLAN, WPAN, and Guard). The Offset, Length, and Guard intervals can be dynamically adjusted to modify the number of time-slot channels assigned to WLAN and WPAN data transmission to remain within limits of a desired level of service.

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- 41. C.R. England has also indirectly infringed and continues to indirectly infringe the '040 patent by inducing others to directly infringe the '040 patent. C.R. England has induced and continues to induce customers and end-users, including, but not limited to, C.R. England'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. C.R. England 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 C.R. England have 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. C.R. England has been performing these steps, which constitute induced infringement with the knowledge of the '040 patent and with the knowledge that the induced acts constitute infringement. C.R. England has been aware that the normal and customary use of the Accused Products by others would infringe the '040 patent. C.R. England's inducement is ongoing.
- 42. C.R. England has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '040 patent. C.R. England has contributed and continues 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

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suitable for substantial non-infringing use. C.R. England's contributory infringement is ongoing.

- 43. Furthermore, on information and belief, C.R. England 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.
- 44. C.R. England'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 C.R. England.
- 45. C.R. England's direct infringement of the '040 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of FCS's rights under the patent.
- 46. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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.
- 47. 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 C.R. England's infringement of the '040 patent. C.R. England'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 III: INFRINGEMENT OF U.S. PATENT NO. 7,260,153

- 48. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 49. The USPTO duly issued U.S. Patent No. 7,260,153 (hereinafter, the "153 patent") on August 21, 2007, after a full and fair examination of Application No. 10/423,447, which was filed April 28, 2003..

- 50. FCS owns all substantial rights, interest, and title in and to the '153 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.
- 51. 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.
- 52. The written description of the '153 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.
- 53. 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.
- 54. C.R. England has directly infringed and continues to directly infringe the '153 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 55. C.R. England has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '153 patent. For example, C.R. England, 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 crosstalk 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

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metric and estimated channel singular values to calculate a crosstalk measure for the sub-streams.

56. More specifically, and as just one example of infringement, C.R. England's conduct has comprised using the Accused Products, which are adapted by C.R. England for wireless communications using multiple communication protocols, including LTE and/or 802.11n. 802.11n implements beamforming in a MIMO system. LTE supports single and multi-user MIMO transmissions. A MIMO communication system comprises at least two communication devices (e.g., STA A, STA B, BS and/or UE) having a plurality of radiating elements (antennas) for the parallel transmission of data sub-streams. 802.11n implements beamforming that defines a channel matrix metric (Hk) that comprises a predefined function (equation 20-62) of channel matrix singular values for each of the data sub-streams. MIMO systems utilized within the context of LTE transmission can define a channel matrix metric that comprises a predefined function of channel matrix singular values for each of the data sub-streams. Each of the predefined functions provides a measure of cross-talk SNR ratio for substreams. To implement implicit beamforming, the beamformer obtains an estimated channel matrix. As part of the LTE standards, reporting of channel information further consists of a channel quality indicator ("CQI"). To estimate channel singular values, an SVD is performed of the baseband-to-baseband channel matrix metric. The SVD comprises a left-hand unitary weighting matrix, e.g., BRX,K, a diagonal matrix of said estimated channel singular values, and a right-hand unitary weighting matrix ATX,K. Various algorithms can be implemented within an LTE MIMO system, including an SVD comprising a left-hand unitary weighting matrix, a diagonal matrix of said estimated channel singular values, and a right-hand unitary weighting matrix. A crosstalk measure (e.g., KA,k) is calculated for each sub-stream k (e.g., sub-band) from the channel matrix metric (e.g., HAB,k) and the estimated channel singular values.

57. C.R. England had knowledge of the '153 patent at least as of the date when it was notified of the filing of this action.

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58. C.R. England has also indirectly infringed and continues to indirectly infringe the '153 patent by inducing others to directly infringe the '153 patent. C.R. England has induced and continues to induce customers and end-users, including, but not limited to, C.R. England's customers, employees, partners, or contractors, to directly infringe, either literally or under the doctrine of equivalents, the '153 patent by providing or requiring use of the Accused Products. C.R. England 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 '153 patent, including, for example, claim 1. Such steps by C.R. England have 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. C.R. England has been performing these steps, which constitute induced infringement with the knowledge of the '153 patent and with the knowledge that the induced acts constitute infringement. C.R. England has been aware that the normal and customary use of the Accused Products by others would infringe the '153 patent. C.R. England's inducement is ongoing.

59. C.R. England has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '153 patent. C.R. England has contributed and continues to contribute to the direct infringement of the '153 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 '153 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 '153 patent and are not staple articles of commerce suitable for substantial non-infringing use. C.R. England's contributory infringement is ongoing.

- 60. Furthermore, on information and belief, C.R. England 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.
- 61. C.R. England'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 C.R. England.
- 62. C.R. England'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.
- 63. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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.
- 64. 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 C.R. England's infringement of the '153 patent. C.R. England'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 IV: INFRINGEMENT OF U.S. PATENT NO. 7,596,391

- 65. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 66. The USPTO duly issued U.S. Patent No. 7,596,391 (hereinafter, the "'391 patent") on September 29, 2009, after a full and fair examination of Application No. 12/389,252, which was filed February 19, 2009.

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- 67. FCS owns all substantial rights, interest, and title in and to the '391 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.
- 68. The claims of the '391 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 methods and systems for wireless communications between mobile units and vehicles.
- 69. The written description of the '391 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.
- 70. 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 '391 patent.
- 71. C.R. England has directly infringed the '391 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 72. C.R. England has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '391 patent. For example, C.R. England performed a method of wireless communication between a mobile unit and a vehicle comprising a transceiver. The method included receiving a signal by the mobile unit comprising a microprocessor, the signal transmitted from the vehicle comprising the transceiver, the signal comprising a security field and a unique identifier; advising that the mobile unit is within range of the vehicle; determining by the microprocessor if the signal is authorized, the determining comprising parsing the signal to determine the security field and the unique identifier; inputting a voice-activated input and/or a manual input

from a user of the mobile unit via an audio-visual interface associated with the mobile unit, the voice-activated input and/or the manual input is associated with a control instruction; assembling, by the microprocessor, at least one packet of a communication comprising the control instruction; transmitting the at least one packet to the vehicle comprising the transceiver; displaying that the control instruction was input by the user; and storing the communication in a communication log.

73. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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 V: INFRINGEMENT OF U.S. PATENT NO. 7,656,845

- 74. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 75. The USPTO duly issued U.S. Patent No. 7,656,845 (the "'845 patent") on February 2, 2010, after a full and fair examination of Application No. 11/402,172, which was filed April 11, 2006. A Certificate of Correction was issued on November 30, 2010.
- 76. 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 said patent against infringers and to collect damages for all relevant times.
- 77. 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.
- 78. 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

- 79. 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 '845 patent.
- 80. C.R. England has directly infringed and continues to directly infringe the '845 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 81. C.R. England has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least claim 18 of the '845 patent. For example, the Accused Products used by C.R. England provide an apparatus, comprising: a means for allocating at least a first data channel of a plurality of data channels to be shared between a first medium and a second medium, to the first medium for data transmission via a wireless device, and for allocating at least a second data channel of the plurality of data channels to the second medium for data transmission via the wireless device; and a means for dynamically adjusting a number of the data channels assigned to one of the first and second media during the data transmission to remain within limits of a desired level of service.
- 82. More specifically, and as just one example of infringement, C.R. England uses the Accused Products, which comprise a means for allocating at least a first data channel of a plurality of data channels to be shared between a first medium and a second medium, to the first medium for data transmission via a wireless device, and for allocating at least a second data channel of the plurality of data channels to the second medium for data transmission via the wireless device. For example, the Accused Products comprise a processor, an 802.11 transceiver and a Bluetooth transceiver. The processor allocates at least a first data channel of a plurality of data channels to be shared between a first medium and a second medium, to the first medium (e.g., 802.11b) for data transmission via a wireless device, and for allocating

at least a second data channel of the plurality of data channels to the second medium (e.g., Bluetooth) for data transmission via the wireless device. The Accused Product allocates a time-slot channel (WLAN interval) to the first medium (802.11b) for data transmission and a different time-slot channel (WPAN interval) to the second medium (802.15.1). The Accused Products also comprise a means for dynamically adjusting a number of the data channels assigned to one of the first and second media during the data transmission to remain within limits of a desired level of service. 802.15.2-2003 defines a Collaborative Coexistence Mechanism with an AWMA Medium Free Generation that is configured to dynamically allocate data channels to one of the 802.11 Device and the 802.15.1 Device based upon a desired level of service. The 802.11b beacon frame includes a Medium Sharing Element (MSE) which defines the length of the time-slot channels (WLAN, WPAN, and Guard). The Offset, Length and Guard intervals can be dynamically adjusted to modify the number of time-slot channels assigned to WLAN and WPAN data transmission to remain within limits of a desired level of service.

- 83. C.R. England had knowledge of the '845 patent at least as of the date when it was notified of the filing of this action.
- 84. C.R. England has also indirectly infringed and continues to indirectly infringe the '845 patent by inducing others to directly infringe the '845 patent. C.R. England has induced and continues to induce customers and end-users, including, but not limited to, C.R. England's customers, employees, partners, or contractors, to directly infringe, either literally or under the doctrine of equivalents, the '845 patent by providing or requiring use of the Accused Products. C.R. England 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 '845 patent, including, for example, claim 18. Such steps by C.R. England have included, among other things, advising or directing customers, personnel, contractors, or end-users to use the Accused Products in an infringing

- 85. C.R. England has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '845 patent. C.R. England has contributed and continues to contribute to the direct infringement of the '845 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 '845 patent, including, for example, claim 18. 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. C.R. England's contributory infringement is ongoing.
- 86. Furthermore, on information and belief, C.R. England 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.
- 87. C.R. England'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 C.R. England.
- 88. C.R. England's direct infringement of the '845 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of FCS's rights under the patent.
- 89. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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.

90. 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 C.R. England's infringement of the '845 patent. C.R. England'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 VI: INFRINGEMENT OF U.S. PATENT NO. 7,742,388

- 91. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 92. The USPTO duly issued U.S. Patent No. 7,742,388 (hereinafter, the "'388 patent") on June 22, 2010, after a full and fair examination of Application No. 11/185,665, which was filed July 20, 2005.
- 93. 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 said patent against infringers and to collect damages for all relevant times.
- 94. 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.
- 95. 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.

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- 96. 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.
- 97. C.R. England has directly infringed and continues to directly infringe the '388 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 98. C.R. England has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '388 patent. For example, C.R. England performs a method including generating a 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.
- 99. More specifically, and as just one example of infringement, C.R. England's conduct has comprised using the Accused Products, which are adapted for wireless communications using 80.211n and/or the 3GPP Long Term Evolution cellular standard ("LTE"). The Accused Products receive the generated packet (or "frame") with a size ("Tf") corresponding to a protocol (LTE) used for network transmission. Each packet (or "frame") comprises 10 subframes, each sub frame equals 1ms duration. Further, each subframe includes two slots each 0.5ms long. An LTE frame structure (for example frame structure Type 1) is defined using a resource grid that includes multiple subcarriers and OFDM symbols. The resource grid represents various subframes/slots that can include multiple signals such as synchronization signals and reference signals. The synchronization signals PSS and SSS (first training symbols) are used for time and frequency synchronization steps to identify where the

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frame begins and ends. Also, the reference signals/symbols (second training symbols) are used for the channel estimation. Similarly, the Accused Products generate a packet (or "frame") with a size ("LENGTH") corresponding to a protocol (e.g., 802.11n) used for network transmission. The packet (or "frame") comprises a preamble ("PLCP Preamble") having a first training symbol ("Short Training Sequence" or "STS") in HT-STF field and a second training symbol ("Long Training Sequence" or "LTS") in HT-LTF fields. The Accused Products increase the size of the packet by adding subcarriers to the second training symbol ("Reference Signal") to produce an extended The quantity of subcarriers of the second training symbol ("Reference Signal") is greater than a quantity of subcarriers of the first training symbol ("Synchronization Signals"). Likewise, when utilizing the 802.11 protocols, the Accused Products increase the size of the packet by adding subcarriers to the second training symbol ("LTS") to produce an extended packet. The quantity of subcarriers of the second training symbol ("LTS") is greater than a quantity of subcarriers of the first training symbol ("STS"). The Accused Products receive the extended packet transmitted via network and include antennas for transmitting the extended packet.

100. C.R. England had knowledge of the '388 patent at least as of the date when it was notified of the filing of this action.

101. C.R. England has also indirectly infringed and continues to indirectly infringe the '388 patent. C.R. England has induced and continues to induce customers and end-users, including, but not limited to, C.R. England'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. C.R. England 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 C.R. England have 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. C.R. England 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. C.R. England has been aware that the normal and customary use of the Accused Products by others would infringe the '388 patent. C.R. England's inducement is ongoing.

- 102. C.R. England has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '388 patent. C.R. England has contributed and continues to contribute to the direct infringement of the '388 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 '388 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 '388 patent and are not staple articles of commerce suitable for substantial non-infringing use. C.R. England's contributory infringement is ongoing.
- 103. Furthermore, on information and belief, C.R. England 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.
- 104. C.R. England'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 C.R. England.
- 105. C.R. England's direct 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.

106. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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.

107. 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 C.R. England's infringement of the '388 patent. C.R. England'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 VII: INFRINGEMENT OF U.S. PATENT NO. 6,549,583

- 108. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 109. The USPTO duly issued U.S. Patent No. 6,549,583 (hereinafter, the "'583 patent") on April 15, 2003, after a full and fair examination of Application No. 09/790,429, which was filed February 21, 2001.
- 110. 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 said patent against infringers and to collect damages for all relevant times.
- 111. 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 inventions include inventive components that improve upon the function and operation of logistics and tracking systems.
- 112. 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.

- 113. 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.
- 114. C.R. England has directly infringed and continues to directly infringe the '583 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- of equivalents, at least claim 1 of the '583 patent. For example, C.R. England performed 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 likelihood-based 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.
- 116. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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 VIII: INFRINGEMENT OF U.S. PATENT NO. 6,633,616

117. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.

- 118. The USPTO duly issued U.S. Patent No. 6,633,616 (hereinafter, the "'616 patent") on October 14, 2003, after a full and fair examination of Application No. 09/935,081, which was filed August 21, 2001.
- 119. 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 said patent against infringers and to collect damages for all relevant times.
- 120. 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 logistics and tracking systems.
- 121. 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 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.
- 122. 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.
- 123. C.R. England has directly infringed and continues to directly infringe the '616 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 124. C.R. England has directly infringed, either literally or under the doctrine of equivalents, at least claim 12 of the '616 patent. For example, C.R. England performed a method 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 the subsequent OFDM symbol with the fast Fourier transform in the parallel path.

125. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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 IX: INFRINGEMENT OF U.S. PATENT NO. 7,206,837

- 126. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 127. The USPTO duly issued U.S. Patent No. 7,206,837 (the "'837 patent") on April 17, 2007, after a full and fair examination of Application No. 10/287,151, which was filed November 4, 2002.
- 128. FCS owns all substantial rights, interest, and title in and to the '837 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.
- 129. The claims of the '837 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.
- 130. The written description of the '837 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.

- 131. 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 '837 patent.
- 132. C.R. England has directly infringed and continues to directly infringe the '837 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 133. C.R. England has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '837 patent. For example, C.R. England, using the Accused Products, performs a method comprising receiving a location of a mobile communications device that is in transit to a destination, estimating the time-of-arrival bounds for said mobile communications device at said destination for a confidence interval based on said location and at least one historical travel time statistic, and sending the time-of-arrival bounds to said mobile communications device.
- 134. C.R. England had knowledge of the '837 patent at least as of the date when it was notified of the filing of ORBCOMM's Answer and Counterclaims in this action (Dkt. No. 63).
- 135. C.R. England has also indirectly infringed and continues to indirectly infringe the '837 patent by inducing others to directly infringe the '837 patent. C.R. England has induced and continues to induce customers and end-users, including, but not limited to, C.R. England's customers, employees, partners, or contractors, to directly infringe, either literally or under the doctrine of equivalents, the '837 patent by providing or requiring use of the Accused Products. C.R. England 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 '837 patent, including, for example, claim 1. Such steps by C.R. England have included, among other things, advising or directing customers, personnel, contractors, or end-users to use the Accused Products in an infringing manner;

- 136. C.R. England has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '837 patent. C.R. England has contributed and continues to contribute to the direct infringement of the '837 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 '837 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 '837 patent and are not staple articles of commerce suitable for substantial non-infringing use. C.R. England's contributory infringement is ongoing.
- 137. Furthermore, on information and belief, C.R. England 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.
- 138. C.R. England'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 C.R. England.
- 139. C.R. England's direct infringement of the '837 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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- 140. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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.
- 141. 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 C.R. England's infringement of the '837 patent. C.R. England'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 X: INFRINGEMENT OF U.S. PATENT NO. 7,741,968

- 142. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 143. The USPTO duly issued U.S. Patent No. 7,741,968 (the "'968 patent") on June 22, 2010, after a full and fair examination of Application No. 12/143,707, which was filed June 20, 2008.
- 144. FCS owns all substantial rights, interest, and title in and to the '968 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.
- 145. The claims of the '968 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.
- 146. The written description of the '968 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.

- 147. 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 '968 patent.
- 148. C.R. England has directly infringed and continues to directly infringe the '968 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 149. C.R. England has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least claim 7 of the '968 patent. For example, the Accused Products, used by Defendant, provide a computer readable medium having stored thereon computer executable code, said computer executable code. The Accused Products include code for controlling a reception at a master mobile device of geographical positional data relating to a plurality of mobile devices; code for controlling said master mobile device to display received ones of said geographical positions of said plurality of other mobile devices; code for causing said master mobile device to send convergence geographical data-to a selected one of said other mobile devices, said sent geographical data allowing said selected mobile device to converge with said master mobile device; wherein said geographical data comprises turn by turn instructions leading said selected mobile device to said master device; and wherein said code continuously generates an ETA for said selected mobile device to converge with said master mobile device.
- 150. C.R. England had knowledge of the '968 patent at least as of the date when it was notified of the filing of ORBCOMM's Answer and Counterclaims in this action (Dkt. No. 63).
- 151. C.R. England has also indirectly infringed and continues to indirectly infringe the '968 patent by inducing others to directly infringe the '968 patent. C.R. England has induced and continues to induce customers and end-users, including, but

not limited to, C.R. England's customers, employees, partners, or contractors, to directly infringe, either literally or under the doctrine of equivalents, the '968 patent by providing or requiring use of the Accused Products. C.R. England 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 '968 patent, including, for example, claim 7. Such steps by C.R. England have 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. C.R. England has been performing these steps, which constitute induced infringement with the knowledge of the '968 patent and with the knowledge that the induced acts constitute infringement. C.R. England has been aware that the normal and customary use of the Accused Products by others would infringe the '968 patent. C.R. England's inducement is ongoing.

152. C.R. England has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '968 patent. C.R. England has contributed and continues to contribute to the direct infringement of the '968 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 '968 patent, including, for example, claim 7. The special features constitute a material part of the invention of one or more of the claims of the '968 patent and are not staple articles of commerce suitable for substantial non-infringing use. C.R. England's contributory infringement is ongoing.

153. Furthermore, on information and belief, C.R. England 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.

- 154. C.R. England'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 C.R. England.
- 155. C.R. England's direct infringement of the '968 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of FCS's rights under the patent.
- 156. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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.
- 157. 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 C.R. England's infringement of the '968 patent. C.R. England'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 XI: INFRINGEMENT OF U.S. PATENT NO. 7,747,291

- 158. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 159. The USPTO duly issued U.S. Patent No. 7,747,291 (hereinafter, the "'291 patent") on June 29, 2010, after a full and fair examination of Application No. 12/546,650, which was filed August 24, 2009. A Certificate of Correction was issued on June 18, 2013.

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- 160. FCS owns all substantial rights, interest, and title in and to the '291 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.
- 161. The claims of the '291 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 logistics and tracking systems.
- 162. The written description of the '291 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.
- 163. 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 '291 patent.
- 164. C.R. England has directly infringed and continues to directly infringe the '291 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 165. C.R. England has directly infringed, either literally or under the doctrine of equivalents, at least claim 20 of the '291 patent. For example, C.R. England, using the Accused Products, performs a method of wirelessly providing a traffic update to a vehicle. The method includes storing information, at a wireless communication system, the information associated with the vehicle comprising a transceiver; receiving a communication from the vehicle, through a mobile unit comprising a microprocessor, the communication comprising identification and GPS information; interfacing the wireless communication system with a network to obtain a traffic update; sending the traffic update from the wireless communication system, through

the mobile unit, to the vehicle, and storing, in a memory, information related to the communication in a communication log.

166. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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 XII: INFRINGEMENT OF U.S. PATENT NO. 8,005,053

- 167. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 168. The USPTO duly issued U.S. Patent No. 8,005,053 (hereinafter, the "'053 patent") on August 23, 2011, after a full and fair examination of Application No. 12/696,760, which was filed January 29, 2010. A Certificate of Correction was issued on February 14, 2012.
- 169. 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 said patent against infringers and to collect damages for all relevant times.
- 170. 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 logistics and tracking systems.
- 171. 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 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.
- 172. 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.

173. C.R. England has directly infringed and continues to directly infringe the '053 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.

174. C.R. England has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '053 patent. For example, the Accused Products, used by C.R. England, comprise a first wireless transceiver configured to communicate data according to a first wireless protocol; a second wireless transceiver configured to communicate data according to a second wireless protocol that is different from the first wireless protocol; and a controller configured to select one of the first and second wireless transceivers to communicate data of both the first and second wireless protocols, wherein the apparatus is configured to encode data of the wireless protocol for the unselected transceiver into data of the wireless protocol for the selected transceiver.

175. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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 XIII: INFRINGEMENT OF U.S. PATENT NO. 9,299,044

- 176. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 177. The USPTO duly issued U.S. Patent No. 9,299,044 (hereinafter, the "'044 patent") on March 29, 2016, after a full and fair examination of Application No. 14/480,297, which was filed September 8, 2014.
- 178. FCS owns all substantial rights, interest, and title in and to the '044 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.
- 179. The claims of the '044 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed

- 180. The written description of the '044 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.
- 181. 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 '044 patent.
- 182. C.R. England has directly infringed and continues to directly infringe the '044 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 183. C.R. England has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '044 patent. For example, C.R. England, using the Accused Products, performs a method for management of mobile field assets *via* wireless handheld devices. The method includes accessing, at a beginning of a work shift using a handheld device, at least one template stored on a server located remotely from the handheld device, the at least one template listing tasks that are assigned to be completed before an end of the work shift; reporting a status of each of the tasks at least once during the work shift by synchronizing the handheld device to the server; and updating the at least one template stored on the server in response to the status with unfinished or new tasks.
- 184. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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.

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- 185. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 186. The USPTO duly issued U.S. Patent No. 9,747,565 (hereinafter, the "565 patent") on August 29, 2017, after a full and fair examination of Application No. 15/071,003, which was filed March 15, 2016.
- 187. FCS owns all substantial rights, interest, and title in and to the '565 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.
- 188. The claims of the '565 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 logistics and tracking systems.
- 189. The written description of the '565 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.
- 190. 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 '565 patent.
- 191. C.R. England has directly infringed and continues to directly infringe the '565 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 192. C.R. England has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '565 patent. For example, C.R. England, using the Accused Products, performs a method for management of mobile field assets via wireless handheld devices. The method includes accessing a template stored on a

server located remotely from a handheld device, the template listing tasks to be completed before an end of a work shift, reporting a status of each of the tasks at least once by synchronizing the handheld device to the server, and updating the template responsive to the status with unfinished or new tasks at the end of the work shift.

193. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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 XV: INFRINGEMENT OF U.S. PATENT NO. 10,671,949

- 194. FCS repeats and re-alleges the allegations in Paragraphs 1-21 above as though fully set forth in their entirety.
- 195. The USPTO duly issued U.S. Patent No. 10,671,949 (hereinafter, the "'949 patent") on June 2, 2020, after a full and fair examination of Application No. 15/660,685, which was filed July 26, 2017.
- 196. FCS owns all substantial rights, interest, and title in and to the '949 patent, including the sole and exclusive right to prosecute this action and enforce said patent against infringers and to collect damages for all relevant times.
- 197. The claims of the '949 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 logistics and tracking systems.
- 198. The written description of the '949 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.

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- 199. 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 '949 patent.
- 200. C.R. England has directly infringed and continues to directly infringe the '949 patent by importing, manufacturing, providing, supplying, using, distributing, selling, or offering to sell the Accused Products.
- 201. C.R. England has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '949 patent. For example, C.R. England, using the Accused Products, performs a method for management of mobile field assets *via* wireless handheld devices. The method includes accessing a template stored on a server located remotely from a handheld device, the template listing a first set of tasks to be completed in a first predetermined time period, reporting, after a time of the accessing, a status of each of the tasks of the first set of tasks by synchronizing the handheld device to the server, and updating the template responsive to the status, the updated template including a second set of tasks to be completed in a second predetermined time period.
- 202. FCS has been damaged as a result of the infringing conduct by C.R. England alleged above. Thus, C.R. England 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

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

#### PRAYER FOR RELIEF

- 204. FCS requests that the Court find in its favor and against C.R. England, 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 C.R. England or others acting in concert therewith;

- d. Judgment that C.R. England accounts for and pays to FCS all damages to and costs incurred by FCS because of C.R. England's infringing activities and other conduct complained of herein;
- e. Judgment that C.R. England's infringements be found willful as to the '040 patent, the '153 patent, the '845 patent, the '388 patent, the '837 patent, and the '968 patent, and that the Court award treble damages for the period of such willful infringement pursuant to 35 U.S.C. § 284;
- f. Pre-judgment and post-judgment interest on the damages caused by C.R. England's infringing activities and other conduct complained of herein;
- g. 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
- h. All other and further relief as the Court may deem just and proper under the circumstances.

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