# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

CORETEK LICENSING LLC,	
Plaintiff,	Civil Action No.:
v.	TRIAL BY JURY DEMANDED
SPOK, INC.,	
Defendant	

## COMPLAINT FOR INFRINGEMENT OF PATENT

Now comes, Plaintiff, Coretek Licensing LLC ("Plaintiff" or "Coretek"), by and through undersigned counsel, and respectfully alleges, states, and prays as follows:

# **NATURE OF THE ACTION**

1. This is an action for patent infringement under the Patent Laws of the United States, Title 35 United States Code ("U.S.C.") to prevent and enjoin Defendant Spok, Inc. (hereinafter "Defendant"), from infringing and profiting, in an illegal and unauthorized manner, and without authorization and/or consent from Plaintiff from U.S. Patent No 8,861,512 ("the '512 Patent"), U.S. Patent No. 9,173,154 ("the '154 Patent"), U.S. Patent No. 9,369,575 ("the '575 Patent"), and U.S. Patent No. 9,591,551 ("the '551 Patent") (collectively the "Patents-in-Suit"), which are attached hereto as Exhibits A, B, C, and D, respectively, and incorporated herein by reference, and pursuant to 35 U.S.C. §271, and to recover damages, attorney's fees, and costs.

#### THE PARTIES

- 2. Plaintiff is a Texas limited liability company with its principal place of business at 2018 Dallas Parkway Suite 214-1051, Plano, Texas 75093-4362.
- 3. Upon information and belief, Defendant is a corporation organized under the laws of Delaware, with a principal place of business at 5911 Kingstowne Village Parkway, 6<sup>th</sup> Floor,

Alexandria, VA 22315. Upon information and belief, Defendant may be served with process c/o Corporation Service Company, 2711 Centerville Rd., Suite 400, Wilmington, Delaware 19808.

4. Plaintiff is further informed and believes, and on that basis alleges, that Defendant operates the website www.spok.com. Defendant derives a portion of its revenue from sales and distribution via electronic transactions conducted on and using at least, but not limited to, its Internet website located at www.spok.com, and its incorporated and/or related systems (collectively the "Spok Website"). Plaintiff is informed and believes, and on that basis alleges, that, at all times relevant hereto, Defendant has done and continues to do business in this judicial district, including, but not limited to, providing products/services to customers located in this judicial district by way of the Spok Website.

## **JURISDICTION AND VENUE**

- 5. This is an action for patent infringement in violation of the Patent Act of the United States, 35 U.S.C. §§1 *et seq*.
- 6. The Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§1331 and 1338(a).
- 7. This Court has personal jurisdiction over Defendant by virtue of its systematic and continuous contacts with this jurisdiction and its residence in this District, as well as because of the injury to Plaintiff, and the cause of action Plaintiff has risen in this District, as alleged herein.
- 8. Defendant is subject to this Court's specific and general personal jurisdiction pursuant to its substantial business in this forum, including: (i) at least a portion of the infringements alleged herein; (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services

provided to individuals in this forum state and in this judicial District; and (iii) being incorporated in this District.

9. Venue is proper in this judicial district pursuant to 28 U.S.C. §1400(b) because Defendant resides in this District under the Supreme Court's opinion in *TC Heartland v. Kraft Foods Group Brands LLC*, 137 S. Ct. 1514 (2017) through its incorporation, and regular and established place of business in this District.

## **FACTUAL ALLEGATIONS**

- 10. On October 14, 2014, the United States Patent and Trademark Office ("USPTO") duly and legally issued the '512 Patent, entitled "METHOD OF ENABLING A WIRELESS DEVICE TO MAKE A NETWORK CONNECTION WITHOUT USING A NETWORK OPERATOR'S HOME LOCATION REGISTER" after a full and fair examination. The '512 Patent is attached hereto as Exhibit A and incorporated herein as if fully rewritten.
- 11. Plaintiff is presently the owner of the '512 Patent, having received all right, title and interest in and to the '512 Patent from the previous assignee of record. Plaintiff possesses all rights of recovery under the '512 Patent, including the exclusive right to recover for past infringement.
- 12. To the extent required, Plaintiff has complied with all marking requirements under 35 U.S.C. § 287 with respect to the '512 Patent.
- 13. The invention claimed in the '512 Patent comprises a method, system, and/or server enabling a wireless device to initiate a network connection without using a network operator's home location register.

14. Claim 1 of the '512 Patent recites a method of enabling a wireless device, located in a region, to initiate a network connection without using a network operator's home location register.

## 15. Claim 1 of the '512 Patent states:

- "1. A method of enabling a wireless device, located in a region, to initiate a network connection without using a network operator's home location register that covers that region, comprising the steps of:
- (a) the wireless device using a module that is responsible for contacting a server to communicate with the server over a wireless link, wherein the device includes the module that is implemented as software and that is downloadable to the device;
- (b) the wireless device using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, a software application running on the server deciding on the appropriate routing to a third party end-user over all available networks for that call request without using the network operator's home or visitor location register." See Exhibit A.

## 16. Claim 8 of the '512 Patent states:

"8. The method of claim 1, in which the server also acts as a media server so that the network connection is not limited to a voice connection, but includes also the transfer of any media asset, including data, video, and audio files, web pages and data, video and audio streaming." See Exhibit A.

## 17. Claim 12 of the '512 Patent states:

- "12. The method of claim 1 in which the module establishes and controls communication between the device and the server." See Exhibit A.
- 18. Claim 23 of the '512 Patent recites a system comprising a wireless device located in a region and a server for enabling the wireless device to communicate with the server to initiate a network connection without using a network operator's home location.

## 19. Claim 23 of the '512 Patent states:

- "23. A system comprising a wireless device located in a region and a server for enabling the wireless device to communicate with the server to initiate a network connection without using a network operator's home location register that covers that region, wherein the server includes a software application that functions as a calls manager, wherein:
- (a) the wireless device is operable using a module that is responsible for contacting the server to communicate with the server over a wireless link, wherein the device includes the module that is implemented as software and that is downloadable to the device;
- (b) the wireless device is operable using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, the calls manager software included on the server is operable to decide on the appropriate routing to a third party end-user over all available networks for that call request without using the network operator's home or visitor location register." See Exhibit A.
- 20. Claim 24 of the '512 Patent recites a server for enabling a wireless device to communicate with the server to initiate a network connection without using a network operator's home location register.

## 21. Claim 24 of the '512 Patent states:

- "24. A server for enabling a wireless device to communicate with the server to initiate a network connection without using a network operator's home location register, wherein the server includes a software application that functions as a calls manager, wherein:
- (a) the wireless device is operable using a module that is responsible for contacting the server to communicate with the server over a wireless link, wherein the device includes the module that is implemented as software and that is downloadable to the device;
- (b) the wireless device is operable using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, the calls manager software included on the server is operable to decide on the appropriate routing to a third party end-user over all available networks for that call request without using that network operator's home or visitor location register." See Exhibit A.

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- 22. Defendant commercializes, inter alia, methods that perform all the steps recited in at least one claim of the '512 Patent. More particularly, Defendant commercializes, inter alia, methods, systems, and/or servers that perform all the steps recited in Claims 1, 8, 12, 23, and/or 24 of the '512 Patent. Specifically, Defendant makes, uses, sells, offers for sale, or imports a method, system, and/or server that enables a wireless device to initiate a network connection without using a network operator's home location register that encompasses that which is covered by Claims 1, 8, 12, 23, and/or 24 of the '512 Patent.
- 23. On October 27, 2015, the United States Patent and Trademark Office ("USPTO") duly and legally issued the '154 Patent, entitled "METHOD OF ENABLING A WIRELESS DEVICE TO MAKE A NETWORK CONNECTION WITHOUT USING A NETWORK OPERATOR'S HOME LOCATION REGISTER" after a full and fair examination. The '154 Patent is attached hereto as Exhibit B and incorporated herein as if fully rewritten.
- 24. Plaintiff is presently the owner of the '154 Patent, having received all right, title and interest in and to the '154 Patent from the previous assignee of record. Plaintiff possesses all rights of recovery under the '154 Patent, including the exclusive right to recover for past infringement.
- 25. To the extent required, Plaintiff has complied with all marking requirements under 35 U.S.C. § 287 with respect to the '154 Patent.
- 26. The invention claimed in the '154 Patent comprises a method, system, server, and/or computer product enabling a wireless device to initiate a network connection without using a network operator's home location register.
- 27. Claim 1 of the '154 Patent recites a method of enabling a wireless device to initiate a network connection without using a network operator's home location register.

## 28. Claim 1 of the '154 Patent states:

- "1. A method of enabling a wireless handheld cellular phone device, located in a region, to initiate a network connection without using a network operator's home location register that covers that region, comprising the steps of:
- (a) the wireless handheld cellular phone device using a module that is responsible for contacting a server to communicate with the server over a wireless link, wherein the wireless handheld cellular phone device includes the module that is implemented as software and that is downloadable to the wireless handheld cellular phone device;
- (b) the wireless handheld cellular phone device using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, a software application running on the server deciding on the appropriate routing to a 3rd party end-user for that call request without using the network operator's home or visitor location register." See Exhibit B.

## 29. Claim 7 of the '154 Patent states:

"7. The method of claim 1, in which the server also acts as a media server so that the network connection is not limited to a voice connection, but includes also the transfer of any media asset, including data, video, and audio files, web pages and data, video and audio streaming.." See Exhibit B.

## 30. Claim 11 of the '154 Patent states:

- "11. The method of claim 1 in which the module establishes and controls communication between the device and the server." See Exhibit B.
- 31. Claim 22 of the '154 Patent recites a system comprising a wireless handheld cellular phone device located in a region and a server for enabling the wireless handheld cellular phone device to communicate with the server to initiate a network connection without using a network operator's home location register.

## 32. Claim 22 of the '154 Patent states:

"22. A system comprising a wireless handheld cellular phone device located in a region and a server for enabling the wireless handheld cellular phone device to communicate with the server to initiate a network connection without using a network operator's home location register that covers that region, wherein the server includes a software application that functions as a calls manager, wherein:

- (a) the wireless handheld cellular phone device is operable using a module that is responsible for contacting the server to communicate with the server over a wireless link, wherein the wireless handheld cellular phone device includes the module that is implemented as software and that is downloadable to the wireless handheld cellular phone device;
- (b) the wireless handheld cellular phone device is operable using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, the calls manager software included on the server is operable to decide on the appropriate routing to a 3rd party end-user for that call request without using the network operator's home or visitor location register." See Exhibit B.
- 33. Claim 23 of the '154 Patent recites a server for enabling a wireless handheld cellular phone device to communicate with the server to initiate a network connection without using a network operator's home location register.

## 34. Claim 23 of the '154 Patent states:

- "23. A server for enabling a wireless handheld cellular phone device to communicate with the server to initiate a network connection without using a network operator's home location register, wherein the server includes a software application that functions as a calls manager, wherein:
- (a) the wireless handheld cellular phone device is operable using a module that is responsible for contacting the server to communicate with the server over a wireless link, wherein the wireless handheld cellular phone device includes the module that is implemented as software and that is downloadable to the wireless handheld cellular phone device;
- (b) the wireless handheld cellular phone device is operable using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, the calls manager software included on the server is operable to decide on the appropriate routing to a 3rd party end-user for that call request without using that network operator's home or visitor location register." See Exhibit B.

- 35. Claim 24 of the '154 Patent recites a computer program product that enables a wireless handheld cellular phone device to initiate a network connection without using a network operator's home location register.
  - 36. Claim 24 of the '154 Patent states:
    - "24. Computer program product embodied on a non-transitory storage medium, the computer program product when executing on a wireless handheld cellular phone device configured to enable the wireless handheld cellular phone device, when located in a region, to initiate a network connection without using a network operator's home location register that covers that region, the computer program product configured to:
    - (a) contact a server to communicate with the server over a wireless link, and
    - (b) send, over the wireless link, data to the server that defines a call request;

wherein, in response to the call request, a software application running on the server decides on the appropriate routing to a 3rd party enduser for that call request without using the network operator's home or visitor location register, and wherein the computer program product is downloadable to the wireless handheld cellular phone device." See Exhibit B.

- 37. Defendant commercializes, inter alia, methods, systems, servers, and/or computer products that perform all the steps recited in at least one claim of the '154 Patent. More particularly, Defendant commercializes, inter alia, methods that perform all the steps recited in Claims 1, 7, 11, 22, 23, and/or 24 of the '154 Patent. Specifically, Defendant makes, uses, sells, offers for sale, or imports a method, system, server, and/or computer product that enables a wireless device to initiate a network connection without using a network operator's home location register that encompasses that which is covered by Claims 1, 7, 11, 22, 23, and/or 24 of the '154 Patent.
- 38. On June 14, 2016, the United States Patent and Trademark Office ("USPTO") duly and legally issued the '575 Patent, entitled "DYNAMIC VOIP LOCATION SYSTEM" after a full

and fair examination. The '575 Patent is attached hereto as Exhibit C and incorporated herein as if fully rewritten.

- 39. Plaintiff is presently the owner of the '575 Patent, having received all right, title and interest in and to the '575 Patent from the previous assignee of record. Plaintiff possesses all rights of recovery under the '575 Patent, including the exclusive right to recover for past infringement.
- 40. To the extent required, Plaintiff has complied with all marking requirements under 35 U.S.C. § 287 with respect to the '575 Patent.
- 41. The invention claimed in the '575 Patent comprises a system for detecting or determining any given VoIP (Voice over internet protocol) location of any VoIP enabled wireless device registered to the system.
- 42. Claim 1 of the '575 Patent recites a system for detecting or determining any given "VoIP (Voice over internet protocol) location" of any "VoIP enabled wireless device registered to the system".

## 43. Claim 1 of the '575 Patent states:

- "1. A system for detecting or determining any given "VoIP (Voice over internet protocol) location" of any "VoIP enabled wireless device registered to the system" by extracting any such device's "VoIP address or return path" and storing it and updating it in one or more accessible databases, the system including a server, a VoIP enabled wireless device registered to the server and a software module downloadable from the server to the VoIP enabled wireless device, in which:
- (a) the system is adapted to receive VOID communications from multiple VoIP enabled wireless devices;
- (b) the system enables access to information in one or more databases;
- (c) the system is capable of extracting and reporting dynamically the "VoIP address or return path" and all associated information from each incoming data communication from any "VoIP enabled wireless device

- registered to the system" into a database(s) associated with each corresponding registered VoIP enabled wireless device user account;
- (d) the system is capable of extracting a specific "VoIP address or return path" and all associated information corresponding to a specific registered VOID enabled wireless device user account from the system accessible database(s) and communicating with each specific VoIP enabled wireless device registered to the system through each specific "VoIP address or return path";
- (e) in which the VoIP enabled wireless device registered to the server incorporates the software module, which at certain time intervals authenticates and connects to the server which is part of the system, and
- (f) wherein a time between each time interval of the registered VoIP enabled wireless device authenticating and connecting with the server is less than a time allowed by the registered VoIP enabled wireless device to receive a response from the server." See Exhibit C.
- 44. Defendant commercializes, inter alia, systems that perform all the steps recited in at least one claim of the '575 Patent. More particularly, Defendant commercializes, inter alia, methods that perform all the steps recited in Claim 1 of the '575 Patent. Specifically, Defendant makes, uses, sells, offers for sale, or imports a system that detects or determines any given VoIP (Voice over internet protocol) location of any VoIP enabled wireless device registered to the system that encompasses that which is covered by Claim 1 of the '575 Patent.
- 45. On March 7, 2017, the United States Patent and Trademark Office ("USPTO") duly and legally issued the '551 Patent, entitled "METHOD OF ENABLING A WIRELESS DEVICE TO MAKE A NETWORK CONNECTION WITHOUT USING A NETWORK OPERATOR'S HOME LOCATION REGISTER" after a full and fair examination. The '551 Patent is attached hereto as Exhibit D and incorporated herein as if fully rewritten.
- 46. Plaintiff is presently the owner of the '551 Patent, having received all right, title and interest in and to the '551 Patent from the previous assignee of record. Plaintiff possesses all

rights of recovery under the '551 Patent, including the exclusive right to recover for past infringement.

- 47. To the extent required, Plaintiff has complied with all marking requirements under 35 U.S.C. § 287 with respect to the '551 Patent.
- 48. The invention claimed in the '551 Patent comprises a method, system, server, and/or computer product enabling a wireless device to initiate a network connection without using a network operator's home location register.
- 49. Claim 1 of the '551 Patent recites a computer program product configured to enable the wireless device to initiate a network connection without using a network operator's home location register.

## 50. Claim 1 of the '551 Patent states:

- "1. Computer program product embodied on a non-transitory storage medium, the computer program product when executing on a wireless device configured to enable the wireless device, when located in a region, to initiate a network connection without using a network operator's home location register that covers that region, the computer program product configured to:
- (a) contact a server to communicate with the server over a wireless link, and
- (b) send, over the wireless link, data to the server that defines a call request;

wherein, in response to the call request, a software application running on the server decides on the appropriate routing to a 3rd party enduser for that call request without using the network operator's home or visitor location register." See Exhibit D.

#### 51. Claim 3 of the '551 Patent states:

- "3. Computer program product of claim 1, wherein the computer program product is downloadable to the wireless device." See Exhibit D.
- 52. Claim 4 of the '551 Patent states:

"4. Computer program product of claim 1, wherein the computer program product is embedded in the wireless device." See Exhibit D.

## 53. Claim 5 of the '551 Patent states:

"5. Computer program product of claim 1, wherein the server is an application server." See Exhibit D.

## 54. Claim 7 of the '551 Patent states:

"7. Computer program product of claim 1, wherein the wireless device uses the internet to communicate with the server." See Exhibit D.

## 55. Claim 9 of the '551 Patent states:

"9. Computer program product of claim 1, wherein the computer program product is configured to receive calls at the wireless device." See Exhibit D.

## 56. Claim 11 of the '551 Patent states:

"11. Computer program product of claim 1, wherein the network connection for that call is not limited to a voice connection, but includes also the transfer of any media assets, including data-, video- and audio files, web pages, and data-, video- and audio streaming." See Exhibit D.

## 57. Claim 12 of the '551 Patent states:

"12. Computer program product of claim 1, wherein the computer program product is configured to provide messages over the internet, or HTTP over the internet communication from the wireless device to the server." See Exhibit D.

## 58. Claim 13 of the '551 Patent states:

"13. Computer program product of claim 12, wherein the computer program product is configured to receive at the wireless device manually user-entered data required by the server." See Exhibit D.

#### 59. Claim 14 of the '551 Patent states:

- "14. Computer program product of claim 1, wherein the computer program product is configured to establish and control communication between the wireless device and the server." See Exhibit D.
- 60. Claim 22 of the '551 Patent recites a method of enabling a wireless device, located in a region, to initiate a network connection without using a network operator's home location register.

## 61. Claim 22 of the '551 Patent states:

- "22. A method of enabling a wireless device, located in a region, to initiate a network connection without using a network operator's home location register that covers that region, comprising the steps of:
- (a) the wireless device using a module that is responsible for contacting a server to communicate with the server over a wireless link, wherein the wireless device includes the module that is implemented as software and that is downloadable to the wireless device;
- (b) the wireless device using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, a software application running on the server deciding on the appropriate routing to a 3rd party end-user for that call request without using the network operator's home or visitor location register." See Exhibit D.
- 62. Claim 23 of the '551 Patent recites system enabling a wireless device to communicate with the server to initiate a network connection without using a network operator's home location register.

## 63. Claim 23 of the '551 Patent states:

- "23. A system comprising a wireless device located in a region and a server for enabling the wireless device to communicate with the server to initiate a network connection without using a network operator's home location register that covers that region, wherein the server includes a software application that functions as a calls manager, wherein:
- (a) the wireless device is operable using a module that is responsible for contacting the server to communicate with the server over a wireless link, wherein the wireless device includes the module that is implemented as software and that is downloadable to the wireless device;

- (b) the wireless device is operable using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, the calls manager software included on the server is operable to decide on the appropriate routing to a 3rd party end-user for that call request without using the network operator's home or visitor location register." See Exhibit D.
- 64. Claim 24 of the '551 Patent recites a server for enabling a wireless device to communicate with the server to initiate a network connection without using a network operator's home location register.

## 65. Claim 24 of the '551 Patent states:

- "24. A server for enabling a wireless device to communicate with the server to initiate a network connection without using a network operator's home location register, wherein the server includes a software application that functions as a calls manager, wherein:
- (a) the wireless device is operable using a module that is responsible for contacting the server to communicate with the server over a wireless link, wherein the wireless device includes the module that is implemented as software and that is downloadable to the wireless device;
- (b) the wireless device is operable using the module to send, over the wireless link, data to the server that defines a call request;
- (c) in response to the call request, the calls manager software included on the server is operable to decide on the appropriate routing to a 3rd party end-user for that call request without using that network operator's home or visitor location register." See Exhibit D.
- 66. Defendant commercializes, inter alia, methods, systems, servers, and/or computer products that perform all the steps recited in at least one claim of the '551 Patent. More particularly, Defendant commercializes, inter alia, methods that perform all the steps recited in Claims 1, 3, 4, 5, 7, 9, 11, 12, 13, 14, 22, 23, and/or 24 of the '551 Patent. Specifically, Defendant makes, uses, sells, offers for sale, or imports a method, system, server, and/or computer product that enables a wireless device to initiate a network connection without using a network operator's home location

register that encompasses that which is covered by Claims 1, 3, 4, 5, 7, 9, 11, 12, 13, 14, 22, 23, and/or 24 of the '551 Patent.

# **DEFENDANT'S PRODUCT(S)**

## U.S. 8,861,512

- 67. Defendant offers solutions, such as the "Spok Mobile application" (the "Accused Product") communications software.
- 68. A non-limiting and exemplary claim chart comparing the Accused Product to Claims 1, 8, 12, 23, and/or 24 of the '512 Patent is attached hereto as Exhibit E and is incorporated herein as if fully rewritten.
- 69. As recited in Claim 1, the Accused Product discloses a method of enabling a wireless device (e.g., Smartphone), located in a region, to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region. The Accused Product uses Internet or IP network for calling. Hence, it bypasses network operator's home location register as Wi-Fi or internet based calling does not require home location register (HLR). See Exhibit E.
- 70. As recited in one step of Claim 1, the wireless device (e.g., Smartphone) using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless device (e.g., Smartphone). See Exhibit E.
- 71. As recited in another step of Claim 1, the wireless device (e.g., Smartphone) using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data

to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit E.

- 72. As recited in another step of Claim 1, in response to the call request (e.g., Invite signal from caller to server), a software application (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) running on the server (e.g., Spok Mobile server) deciding on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit E.
- 73. As recited in Claim 8, The server (e.g., Spok Mobile server) also acts as a media server so that the network connection (e.g., SIP/VoIP Invite) for that call is not limited to a voice connection, but includes also the transfer of any media assets, including data-, video- and audio files, web pages, and data-, video- and audio streaming. See Exhibit E.
- 74. As recited in Claim 12, the module (e.g., Spok Mobile application) establishes and control communication (e.g., SIP/VoIP communication) between the wireless device (e.g., Smartphone) and the server (e.g., Spok Mobile server). See Exhibit E.
- 75. As recited in Claim 23, the Accused Product discloses a system comprising a wireless device (e.g., Smartphone) located in a region and a server (e.g., Spok Mobile server) for enabling the wireless device (e.g., Smartphone) to communicate with the server (e.g., Spok Mobile server) to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region, wherein the server includes a software application (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) that functions as a calls manager. See Exhibit E.

- 76. As recited in one step of Claim 23, the wireless device (e.g., Smartphone) is operable using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless device (e.g., Smartphone). See Exhibit E.
- 77. As recited in another step of Claim 23, the wireless device (e.g., Smartphone) is operable using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit E.
- 78. As recited in another step of Claim 23, in response to the call request (e.g., Invite signal from caller to server), the call manager software (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) included on the server (e.g., Spok Mobile server) is operable to decide on the appropriate routing (e.g., Invite signal from server to callee) to a third party end-user (e.g., Other users using Spok Mobile application) over all available networks for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit E.
- 79. As recited in Claim 24, the Accused Product discloses a server enabling a wireless device (e.g., Smartphone) located in a region and a server for enabling the wireless device to communicate with the server to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region, wherein the server includes a software application that functions as a calls manager. See Exhibit E.

- 80. As recited in one step of Claim 24, the wireless device (e.g., Smartphone) is operable using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless device (e.g., Smartphone). See Exhibit E.
- 81. As recited in another step of Claim 24, the wireless device (e.g., Smartphone) is operable using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit E.
- 82. As recited in another step of Claim 24, in response to the call request (e.g., Invite signal from caller to server), the call manager software (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) included on the server (e.g., Spok Mobile server) is operable to decide on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit E.
- 83. The elements described in the preceding paragraphs are covered by at least Claims 1, 8, 12, 23, and/or 24 of the '512 Patent. Thus, Defendant's use of the Accused Product is enabled by the method, system, and/or server described in the '512 Patent.

## U.S. 9,173,154

84. Defendant offers solutions, such as the "Spok Mobile application" (the "Accused Product") communications software.

- 85. A non-limiting and exemplary claim chart comparing the Accused Product to Claims 1, 7, 11, 22, 23, and/or 24 of the '154 Patent is attached hereto as Exhibit F and is incorporated herein as if fully rewritten.
- 86. As recited in Claim 1, the Accused Product discloses a method of enabling a wireless handheld cellular phone device (e.g., Smartphone), located in a region, to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region. The Accused Product uses Internet or IP network for calling. Hence, it bypasses network operator's home location register as Wi-Fi or internet based calling does not require home location register (HLR). See Exhibit F.
- 87. As recited in one step of Claim 1, the wireless handheld cellular phone device (e.g., Smartphone) using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless handheld cellular phone device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless handheld cellular phone device (e.g., Smartphone). See Exhibit F.
- 88. As recited in another step of Claim 1, the wireless handheld cellular phone device (e.g., Smartphone) using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit F.
- 89. As recited in another step of Claim 1, in response to the call request (e.g., Invite signal from caller to server), a software application (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) running on the server (e.g., Spok Mobile

server) deciding on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit F.

- 90. As recited in Claim 7, the server (e.g., Spok Mobile server) also acts as a media server so that the network connection (e.g., SIP/VoIP Invite) for that call is not limited to a voice connection, but includes also the transfer of any media assets, including data-, video- and audio files, web pages, and data-, video- and audio streaming. See Exhibit F.
- 91. As recited in Claim 11, the module (e.g., Spok Mobile application) establishes and control communication (e.g., SIP/VoIP session) between the device (e.g., Smartphone) and the server (e.g., Spok Mobile server). See Exhibit F.
- 92. As recited in Claim 22, the Accused Product discloses a system comprising a wireless handheld cellular phone device (e.g., Smartphone) located in a region and a server (e.g., Spok Mobile server) for enabling the wireless handheld cellular phone device (e.g., Smartphone) to communicate with the server (e.g., Spok Mobile server) to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region, wherein the server includes a software application (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) that functions as a calls manager. See Exhibit F.
- 93. As recited in one step of Claim 22, the wireless handheld cellular phone device (e.g., Smartphone) is operable using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless handheld cellular phone

device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless handheld cellular phone device (e.g., Smartphone). See Exhibit F.

- 94. As recited in another step of Claim 22, the wireless handheld cellular phone device (e.g., Smartphone) is operable using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit F.
- 95. As recited in another step of Claim 22, in response to the call request (e.g., Invite signal from caller to server), the call manager software (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) included on the server (e.g., Spok Mobile server) is operable to decide on the appropriate routing (e.g., Invite signal from server to callee) to a third party end-user (e.g., Other users using Spok Mobile application) over all available networks for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit F.
- 96. As recited in Claim 23, the Accused Product discloses a server enabling a wireless handheld cellular phone device (e.g., Smartphone) located in a region and a server for enabling the wireless handheld cellular phone device to communicate with the server to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region, wherein the server includes a software application that functions as a calls manager. See Exhibit F.
- 97. As recited in one step of Claim 23, the wireless handheld cellular phone device (e.g., Smartphone) is operable using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok

Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless handheld cellular phone device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless handheld cellular phone device (e.g., Smartphone). See Exhibit F.

- 98. As recited in another step of Claim 23, the wireless handheld cellular phone device (e.g., Smartphone) is operable using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit F.
- 99. As recited in another step of Claim 23, in response to the call request (e.g., Invite signal from caller to server), the call manager software (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) included on the server (e.g., Spok Mobile server) is operable to decide on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit F.
- 100. As recited in Claim 24, the Accused Product discloses a computer program product (e.g., Spok Mobile application) embodied on a non-transitory storage medium (e.g., Smartphone's memory), the computer program product (e.g., Spok Mobile application) when executing on a wireless handheld cellular phone device (e.g., Smartphone) configured to enable the wireless handheld cellular phone device (e.g., Smartphone), when located in a region, to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region. The Accused Product uses Internet or IP network for calling. Hence, it bypasses

network operator's home location register as Wi-Fi or internet based calling does not require home location register (HLR) See Exhibit F.

- 101. As recited in one step of Claim 24, the Accused Product contacts a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi or 4G link). See Exhibit F.
- 102. As recited in another step of Claim 24, the Accused Product sends, over the wireless link (e.g., Wi-Fi or 4G link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit F.
- 103. As recited in another step of Claim 24, in response to the call request (e.g., Invite signal from caller to server), a software application (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) running on the server (e.g., Spok Mobile server) decides on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register, and wherein the computer program product (e.g., Spok Mobile application) is downloadable to the wireless handheld cellular phone device (e.g., Smartphone). See Exhibit F.
- 104. The elements described in the preceding paragraphs are covered by at least Claims 1, 7, 11, 22, 23, and/or 24 of the '154 Patent. Thus, Defendant's use of the Accused Product is enabled by the method, system, server, and/or computer product described in the '154 Patent.

## U.S. 9,369,575

105. Defendant offers solutions, such as the "Spok Go application" (the "Accused Instrumentality") communications smartphone application.

- 106. A non-limiting and exemplary claim chart comparing the Accused Instrumentality to Claim 1 of the '575 Patent is attached hereto as Exhibit G and is incorporated herein as if fully rewritten.
- As recited in Claim 1, a system utilized by the Accused Instrumentality is a system 107. for detecting or determining any given "VoIP (Voice over internet protocol) location" (e.g., IP address of a user device enabled with Spok Go application) of any "VoIP enabled wireless device registered to the system" (e.g., a user device such as a smartphone enabled with Spok Go application) by extracting any such device's "VoIP address or return path" (e.g., IP address of a user device enabled with Spok Go application) and storing it and updating it in one or more accessible databases (e.g., Spok Go application databases), the system including a server (e.g., Spok Go server), a VoIP enabled wireless device registered to the server (e.g., a user device such as a smartphone enabled with Spok Go application) and a software module (e.g., Spok Go application) downloadable from the server (e.g., Spok Go server) to the VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Spok Go application). The system utilized by the Accused Instrumentality comprises an Spok Go server, a user device such as a smartphone enabled with Spok Go application and Spok Go application. The Spok Go application can be installed into a user smartphone device. The Accused Instrumentality also determines and collects IP address (i.e., VoIP address or VoIP location) of the user smartphone device. See Exhibit G.
- 108. As recited in one step of Claim 1, the system utilized by the Accused Instrumentality is the system which is adapted to receive VoIP communications (e.g., voice calling over IP network) from multiple VoIP enabled wireless devices (e.g., user devices such as

smartphones enabled with Spok Go application. The Accused Instrumentality provides voice calling functionality over IP network between users. See Exhibit G.

- Instrumentality is the system which enables access to information in one or more databases. Upon information and belief, when a user initiates a call request for a contact, the system utilized by the Accused Instrumentality access one or more databases associated with Spok Go server to determine the user identification and/or device identification corresponding to the called contact. The system determines the status of the contacted user's device and forwards the call to the corresponding IP address associated with the contacted user. The system updates the user's activity and log information in the corresponding databases. See Exhibit G.
- Instrumentality is the system which is capable of extracting and reporting dynamically the "VoIP address or return path" (e.g., IP address of a user device enabled with Spok Go application) and all associated information (e.g., all information collected by the Accused Instrumentality) from each incoming data communication from any "VoIP enabled wireless device registered to the system" (e.g., a user device such as a smartphone enabled with Spok Go application) into a database(s) associated with each corresponding registered VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Spok Go application) user account. The Accused Instrumentality extracts and updates a user device enabled with Spok Go application's IP address. The Accused Instrumentality stores the IP address, call log information, device identifiers in the databases corresponding to the user. See Exhibit G.
- 111. As recited in another step of Claim 1, the system utilized by the Accused Instrumentality is the system which is capable of extracting a specific "VoIP address or return

path" (e.g., an IP address of a user device such as a smartphone enabled with Spok Go application) and all associated information (e.g., device information, hardware information, online status information, etc.) corresponding to a specific registered VoIP enabled wireless device user account (e.g., a user device such as a smartphone enabled with Spok Go application) from the system accessible database(s) and communicating with each specific VoIP enabled wireless device (e.g., user device of the called contact such as a smartphone enabled with Spok Go application) registered to the system through each specific "VoIP address or return path" (e.g., an IP address of the user device of the called contact such as a smartphone enabled with Spok Go application). The Accused Instrumentality provides voice calling functionality over IP network between users. The Accused Instrumentality extracts and updates IP addresses of the user devices in its databases. The Accused Instrumentality enables a user to call a contact by extracting the contacted user's IP address and initiating call procedure corresponding to that IP address. See Exhibit G.

Instrumentality practices such that the VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Spok Go application) registered to the server (e.g., Spok Go server) incorporates the software module (e.g., Spok Go application), which at certain time intervals (e.g., Spok Go application app polls the Spok Go server after regular intervals) authenticates and connects to the server (e.g., Spok Go server) which is part of the system. A user verifies its email with the system utilized by the Accused Instrumentality to access the service provided by the system. The system authenticates the user and connects the user to the Spok Go server. Upon information and belief, a user device enabled with Spok Go application periodically re-engages with the Spok Go server for any further updates. As shown below, an android application periodically authenticates a user device with the help of an account manager or token, The Spok

Go server authenticates the user device enabled with Spok Go application periodically. See Exhibit G.

- Instrumentality practices such that a time between each time interval of the registered VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Spok Go application) authenticating and connecting with the server (e.g., Spok Go server) is less than a time allowed by the registered VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Spok Go application) to receive a response from the server (e.g., Spok Go server). When a user device such as a smartphone enabled with Spok Go application, during a Spok Go application voice call, switches from cellular network to Wi-Fi network or vice versa, the IP address of the user device changes. The Accused Instrumentality provides seamless and smooth voice calling functionality even when the user device changes the network. The Accused Instrumentality must take less time to authenticate and connect the user device with a new IP address to the Spok Go server than a time allowed by the user device to receive a voice calling response from the server to ensure no data packet loss. See Exhibit G.
- 114. The elements described in the preceding paragraphs are covered by at least Claim 1 of the '575 Patent. Thus, Defendant's use of the Accused Instrumentality is enabled by the method, system, server, and/or computer product described in the '575 Patent.

## <u>U.S. 9,591,551</u>

115. Defendant offers solutions, such as the "Spok Mobile application" (the "Accused Product") communications software.

- 116. A non-limiting and exemplary claim chart comparing the Accused Product to Claims 1, 3, 4, 5, 7, 9, 11, 12, 13, 14, 22, 23, and/or 24 of the '551 Patent is attached hereto as Exhibit H and is incorporated herein as if fully rewritten.
- 117. As recited in Claim 1, the Accused Product discloses a computer program product (e.g., Spok Mobile application) embodied on a non-transitory storage medium (e.g., Smartphone's memory), the computer program product (e.g., Spok Mobile application) when executing on a wireless device (e.g., Smartphone) configured to enable the wireless device (e.g., Smartphone), when located in a region, to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region. The Accused Product uses Internet or IP network for calling. Hence, it bypasses network operator's home location register as Wi-Fi or internet based calling does not require home location register (HLR). See Exhibit H.
- 118. As recited in one step of Claim 1, the Accused Product discloses contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi or 4G link). See Exhibit H.
- 119. As recited in another step of Claim 1, the Accused Product sends, over the wireless link (e.g., Wi-Fi or 4G link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit H.
- 120. As recited in another step of Claim 1, in response to the call request (e.g., Invite signal from caller to server), a software application (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) running on the server (e.g., Spok Mobile server) decides on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal

from caller to server) without using the network operator's home or visitor location register. See Exhibit H.

- 121. As recited in Claim 3, the computer program product (e.g., Spok Mobile application) is downloadable (e.g., install) to the wireless device (e.g., Smartphone). See Exhibit H.
- 122. As recited in Claim 4, the computer program product (e.g., Spok Mobile application) is embedded to the wireless device (e.g., Smartphone). See Exhibit H.
- 123. As recited in Claim 5, the computer program product (e.g., Spok Mobile application) uses an application server (e.g., Spok Mobile server). See Exhibit H.
- 124. As recited in Claim 7, the computer program product (e.g., Spok Mobile application) uses the wireless device (e.g., Smartphone) uses the internet (e.g., Wi-Fi) to communicate with the server (e.g., Spok Mobile server). See Exhibit H.
- 125. As recited in Claim 9, the computer program product (e.g., Spok Mobile application) is configured to receive calls (e.g., voice calls) at the wireless device (e.g., Smartphone). See Exhibit H.
- 126. As recited in Claim 11, the network connection (e.g., SIP/VoIP Invite) for that call is not limited to a voice connection, but includes also the transfer of any media assets, including data-, video- and audio files, web pages, and data-, video- and audio streaming. See Exhibit H.
- 127. As recited in Claim 12, the computer program product (e.g., Spok Mobile application) is configured to provide messages (e.g., video message) over the internet (e.g., Wi-Fi) from the wireless device (e.g., Smartphone) to the server (Spok Mobile server). See Exhibit H.
- 128. As recited in Claim 13, the computer program product (e.g., Spok Mobile application) is configured to receive at the wireless device (e.g., Smartphone) manually user-

entered data (e.g., Spok Mobile application login details) required by the server (e.g., Spok Mobile server). See Exhibit H.

- 129. As recited in Claim 14, the computer program product is configured to establish and control communication (e.g., SIP/VoIP communication) between the wireless device (e.g., Smartphone) and the server (e.g., Spok Mobile server). See Exhibit H.
- 130. As recited in Claim 22, the Accused Product discloses a method of enabling a wireless device (e.g., Smartphone), located in a region, to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region. The Accused Product uses Internet or IP network for calling. Hence, it bypasses network operator's home location register as Wi-Fi or internet based calling does not require home location register (HLR). See Exhibit H.
- 131. As recited in one step of Claim 22, the wireless device (e.g., Smartphone) using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless device (e.g., Smartphone). See Exhibit H.
- 132. As recited in another step of Claim 22, the wireless device (e.g., Smartphone) using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit H.
- 133. As recited in another step of Claim 22, in response to the call request (e.g., Invite signal from caller to server), a software application (e.g., software running at Spok Mobile

application SIP/VoIP proxy Server to route/manage calls) running on the server (e.g., Spok Mobile server) deciding on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit H.

- 134. As recited in Claim 23, the Accused Product discloses a system comprising a wireless device (e.g., Smartphone) located in a region and a server (e.g., Spok Mobile server) for enabling the wireless device (e.g., Smartphone) to communicate with the server (e.g., Spok Mobile server) to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region, wherein the server includes a software application (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) that functions as a calls manager. See Exhibit H.
- 135. As recited in one step of Claim 23, the wireless device (e.g., Smartphone) is operable using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless device (e.g., Smartphone). See Exhibit H.
- 136. As recited in another step of Claim 23, the wireless device (e.g., Smartphone) is operable using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit H.

- 137. As recited in another step of Claim 23, in response to the call request (e.g., Invite signal from caller to server), the call manager software (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) included on the server (e.g., Spok Mobile server) is operable to decide on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit H.
- 138. As recited in Claim 24, the Accused Product discloses a server enabling a wireless device (e.g., Smartphone) located in a region and a server for enabling the wireless device to communicate with the server to initiate a network connection (e.g., SIP/VoIP Invite) without using a network operator's home location register that covers that region, wherein the server includes a software application (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) that functions as a calls manager. See Exhibit H.
- 139. As recited in one step of Claim 24, the wireless device (e.g., Smartphone) is operable using a module (e.g., Spok Mobile application) that is responsible for contacting a server (e.g., Spok Mobile server) to communicate with the server (e.g., Spok Mobile server) over a wireless link (e.g., Wi-Fi link), wherein the wireless device (e.g., Smartphone) includes the module (e.g., Spok Mobile application) that is implemented as software and that is downloadable to the wireless device (e.g., Smartphone). See Exhibit H.
- 140. As recited in another step of Claim 24, the wireless device (e.g., Smartphone) is operable using the module (e.g., Spok Mobile application) to send, over the wireless link (e.g., Wi-Fi link), data to the server (e.g., Spok Mobile server) that defines a call request (e.g., Invite signal from caller to server). See Exhibit H.

- 141. As recited in another step of Claim 24, in response to the call request (e.g., Invite signal from caller to server), the call manager software (e.g., software running at Spok Mobile application SIP/VoIP proxy Server to route/manage calls) included on the server (e.g., Spok Mobile server) is operable to decide on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using Spok Mobile application) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register. See Exhibit H.
- 142. The elements described in the preceding paragraphs are covered by at least Claims 1, 3, 4, 5, 7, 9, 11, 12, 13, 14, 22, 23, and/or 24 of the '551 Patent. Thus, Defendant's use of the Accused Product is enabled by the method, system, server, and/or computer product described in the '551 Patent.

# INFRINGEMENT OF THE PATENTS-IN-SUIT

- 143. Plaintiff realleges and incorporates by reference all of the allegations set forth in the preceding paragraphs
- 144. In violation of 35 U.S.C. § 271, Defendant is now, and has been directly infringing the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent.
- 145. Defendant has had knowledge of infringement of the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent at least as of the service of the present Complaint.
- 146. Defendant has directly infringed and continues to directly infringe at least one claim of the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent by using, at least through internal testing or otherwise, the Accused Product without authority in the United States, and will continue to do so unless enjoined by this Court. As a direct and proximate result of

Defendant's direct infringement of the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent, Plaintiff has been and continues to be damaged.

- 147. Defendant has induced others to infringe the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent by encouraging infringement, knowing that the acts Defendant induced constituted patent infringement, and its encouraging acts actually resulted in direct patent infringement.
- 148. By engaging in the conduct described herein, Defendant has injured Plaintiff and is thus liable for infringement of the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent, pursuant to 35 U.S.C. § 271.
- 149. Defendant has committed these acts of infringement without license or authorization.
- 150. As a result of Defendant's infringement of the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent, Plaintiff has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate for Defendant's past infringement, together with interests and costs.
- 151. Plaintiff will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court. As such, Plaintiff is entitled to compensation for any continuing and/or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement.
- 152. Plaintiff reserves the right to modify its infringement theories as discovery progresses in this case; it shall not be estopped for infringement contention or claim construction purposes by the claim charts that it provides with this Complaint. The claim charts depicted in Exhibits E, F, G, and H are intended to satisfy the notice requirements of Rule 8(a)(2) of the

Federal Rule of Civil Procedure and does not represent Plaintiff's preliminary or final infringement contentions or preliminary or final claim construction positions.

## **DEMAND FOR JURY TRIAL**

153. Plaintiff demands a trial by jury of any and all causes of action.

# **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff prays for the following relief:

- a. That Defendant be adjudged to have directly infringed the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent either literally or under the doctrine of equivalents;
- b. An accounting of all infringing sales and damages including, but not limited to, those sales and damages not presented at trial;
- c. That Defendant, its officers, directors, agents, servants, employees, attorneys, affiliates, divisions, branches, parents, and those persons in active concert or participation with any of them, be permanently restrained and enjoined from directly infringing the '512 Patent, the '154 Patent, the '575 Patent, and the '551 Patent;
- d. An award of damages pursuant to 35 U.S.C. §284 sufficient to compensate Plaintiff for the Defendant's past infringement and any continuing or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement, including compensatory damages;
- e. An assessment of pre-judgment and post-judgment interest and costs against Defendant, together with an award of such interest and costs, in accordance with 35 U.S.C. §284;
- f. That Defendant be directed to pay enhanced damages, including Plaintiff's attorneys' fees incurred in connection with this lawsuit pursuant to 35 U.S.C. §285; and

g. That Plaintiff be granted such other and further relief as this Court may deem just and proper.

Dated: September 29, 2021 Respectfully submitted,

CHONG LAW FIRM PA

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