# PATENT ASSIGNMENT

# Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DATA				
Name			Execution Date	
Jingyi ZHOU		05/22/2013		
David GELTNER		05/28/2013		
Robert Bruce STANSELL		05/31/2013		
Mimi K TAM			05/23/2013	
RECEIVING PARTY DATA				
Name: VERIZO	N PATENT	AND LICENSING INC		
Street Address: One Ver	izon Way			
City: Basking	Basking Ridge			
State/Country: NEW JE	NEW JERSEY			
Postal Code: 07920	07920			
PROPERTY NUMBERS Total: 1				
	13907	Number 597		
PROPERTY NUMBERS Total: 1 Property Type Application Number: CORRESPONDENCE DATA				
PROPERTY NUMBERS Total: 1 Property Type Application Number: CORRESPONDENCE DATA Fax Number: 571 Correspondence will be sent via	4320808 <i>a US Mail w</i>			
PROPERTY NUMBERS Total: 1         Property Type         Application Number:         CORRESPONDENCE DATA         Fax Number:       571         Correspondence will be sent via         Phone:       571	4320808 <i>US Mail wi</i> 4320800	597 hen the fax attempt is unsuccessful.		
PROPERTY NUMBERS Total: 1 Property Type Application Number: CORRESPONDENCE DATA Fax Number: 571 Correspondence will be sent via Phone: 571 Email: mb/	4320808 <i>a US Mail w</i> 4320800 erndsen@h:	597 <i>hen the fax attempt is unsuccessful.</i> arrityllp.com		
PROPERTY NUMBERS Total: 1 Property Type Application Number: CORRESPONDENCE DATA Fax Number: 571 Correspondence will be sent via Phone: 571 Email: mba Correspondent Name: Har	4320808 <i>US Mail wi</i> 4320800 erndsen@ha rity & Harrit	597 <i>hen the fax attempt is unsuccessful.</i> arrityllp.com		
PROPERTY NUMBERS Total: 1         Property Type         Application Number:         CORRESPONDENCE DATA         Fax Number:       571         Correspondence will be sent via         Phone:       571         Email:       mbe         Correspondent Name:       Har         Address Line 1:       113         Address Line 2:       Suit	4320808 4320808 a US Mail wi 4320800 erndsen@h: rity & Harrit 50 Random te 600	597 <i>hen the fax attempt is unsuccessful.</i> arrityllp.com y, LLP h Hills Road		
PROPERTY NUMBERS Total: 1         Property Type         Application Number:         CORRESPONDENCE DATA         Fax Number:       571         Correspondence will be sent via         Phone:       571         Email:       mbe         Correspondent Name:       Har         Address Line 1:       113         Address Line 2:       Suit	4320808 4320808 4320800 erndsen@ha rity & Harrit 50 Random	597 <i>hen the fax attempt is unsuccessful.</i> arrityllp.com y, LLP h Hills Road		
PROPERTY NUMBERS Total: 1         Property Type         Application Number:         CORRESPONDENCE DATA         Fax Number:       571         Correspondence will be sent via         Phone:       571         Email:       mbe         Correspondent Name:       Har         Address Line 1:       113         Address Line 2:       Suit	4320808 4320808 4320800 erndsen@ha rity & Harrit 50 Random te 600 fax, VIRGIN	597 <i>hen the fax attempt is unsuccessful.</i> arrityllp.com y, LLP h Hills Road		
PROPERTY NUMBERS Total: 1         Property Type         Application Number:         CORRESPONDENCE DATA         Fax Number:       571         Correspondence will be sent via         Phone:       571         Email:       mbd         Correspondent Name:       Har         Address Line 1:       113         Address Line 2:       Sui         Address Line 4:       Fail	4320808 4320808 4320800 erndsen@ha rity & Harrit 50 Random te 600 fax, VIRGIN	597 <i>hen the fax attempt is unsuccessful.</i> arrityllp.com y, LLP ı Hills Road NIA 22030		

Date:	05/31/2013			
Total Attachments: 8 source=20130376_Assignment_Verizon#pa source=20130376_Assignment_Verizon#pa source=20130376_Assignment_Verizon#pa source=20130376_Assignment_Verizon#pa source=20130376_Assignment_Verizon#pa	ge2.tif ge3.tif ge4.tif ge5.tif ge6.tif			
source=20130376_Assignment_Verizon#page7.tif source=20130376_Assignment_Verizon#page8.tif				

PATENT REEL: 030527 FRAME: 0869

### DECLARATION AND ASSIGNMENT FOR UTILITY PATENT APPLICATION

Patent Application Title: CLASSIFYING CLIENT DEVICES IN A NETWORK

the patent application for which:

is being filed concurrently herewith, Application Number to be assigned by the USPTO, or use filed on \_\_\_\_\_\_ as United States Application Number \_\_\_\_\_\_ or PCT International Application Number \_\_\_\_\_\_ or PCT International

#### Declaration of Inventor

As a below named inventor, I hereby declare that:

- A. I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought by the above-identified patent application;
- B. The above-identified application was made or authorized to be made by me; and
- C. I hereby acknowledge that any willful false statements made in this declaration are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

#### Inventor Assignment Acknowledgement

For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:

- A. I have sold, assigned and transferred (directly or indirectly), and by this agreement do hereby sell, assign, and transfer, to the Verizon legal entity identified below ("Assignee") and its successors and assigns, my entire worldwide right, title and interest in and to any and all ideas, inventions, methods and improvements which are described in the above-identified patent application, and in and to said application, and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional, and all other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said ideas, inventions, methods and improvements, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
- B. I agree (i) that Assignce may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that, when requested, without charge to, but at the expense of, said Assignee, its successors and/or assigns, to carry out in good faith the intent and purpose of this agreement, I will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other applications or registrations included within the Patent Rights; (iii) to execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights; (iv) to communicate to said Assignee, its successors, assigns, representatives and agents, all facts known to the undersigned relating to said Patent Rights and the history thereof; and (v) to generally do everything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.

C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.

ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US

IN WITNESS to my agreement to the foregoing, I have executed as set forth below:

Full legal name of Inventor: Jingyi ZHOU

Mailing Address: 47 Livingston Dr., Belle Mead, NJ 08502, U.S.A.

Signature:

5/22/13 Date:

### DECLARATION AND ASSIGNMENT FOR UTILITY PATENT APPLICATION

Patent Application Title: CLASSIFYING CLIENT DEVICES IN A NETWORK

the patent application for which:

is being filed concurrently herewith, Application Number to be assigned by the USPTO, or use filed on \_\_\_\_\_\_\_ as United States Application Number \_\_\_\_\_\_ or PCT International Application Number \_\_\_\_\_\_.

#### Declaration of Inventor

As a below named inventor, I hereby declare that:

- A. I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought by the above-identified patent application;
- B. The above-identified application was made or authorized to be made by me; and
- C. I hereby acknowledge that any willful false statements made in this declaration are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

### Inventor Assignment Acknowledgement

For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:

- A. I have sold, assigned and transferred (directly or indirectly), and by this agreement do hereby sell, assign, and transfer, to the Verizon legal entity identified below ("Assignee") and its successors and assigns, my entire worldwide right, title and interest in and to any and all ideas, inventions, methods and improvements which are described in the above-identified patent application, and in and to said application, and all divisional, continuing (in whole or in part), substitute, renewal, relssue, provisional, and all other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said ideas, inventions, methods and improvements, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and applications or registrations; and in and to all original from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
- B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that, when requested, without charge to, but at the expense of, said Assignee, its successors and/or assigns, to carry out in good faith the intent and purpose of this agreement, I will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other applications or registrations included within the Patent Rights; (iii) to execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights; (iv) to communicate to said Assignee, its successors, assigns, representatives and agents, all facts known to the undersigned relating to said Patent Rights and the history thereof; and (v) to generally do everything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.

C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.

ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US

IN WITNESS to my agreement to the foregoing, I have executed as set forth below:

Full legal name of Inventor: David GELTNER

Mailing Address, 701 Kathy Court, Naperville, IL 60540, U.S.A.		T
Signature: Date:	5	28/2013

## DECLARATION AND ASSIGNMENT FOR UTILITY PATENT APPLICATION

Patent Application Title: CLASSIFYING CLIENT DEVICES IN A NETWORK

the patent application for which:

is being filed concurrently	herewith, Application Number to be as	signed by the USPTO, or
was filed on	as United States Application Number	or PCT International
Application Number	···	

#### Declaration of Inventor

As a below named inventor, I hereby declare that:

- A. I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought by the above-identified patent application;
- B. The above-identified application was made or authorized to be made by me; and
- C. I hereby acknowledge that any willful false statements made in this declaration are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

### Inventor Assignment Acknowledgement

For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:

- A. I have sold, assigned and transferred (directly or indirectly), and by this agreement do hereby sell, assign, and transfer, to the Verizon legal entity identified below ("Assignee") and its successors and assigns, my entire worldwide right, title and interest in and to any and all ideas, inventions, methods and improvements which are described in the above-identified patent application, and in and to said application, and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional, and all other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said ideas, inventions, methods and improvements, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and of priority resulting from the filing of any of said applications or registrations; and in and to all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
- B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that, when requested, without charge to, but at the expense of, said Assignee, its successors and/or assigns, to carry out in good faith the intent and purpose of this agreement, I will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other applications or registrations included within the Patent Rights; (iii) to execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights; (iv) to communicate to said Assignee, its successors, assigns, representatives and agents, all facts known to the undersigned relating to said Patent Rights and the history thereof; and (v) to generally do everything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.

- C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.
- ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US

IN WITNESS to my agreement to the foregoing, I have executed as set forth below:

Full legal name of Inventor: Robert Bruce STANSELL

Mailing Address: 2678 Merry Oaks Trail, Winston Salem, NC 27103, U.S.A.

\_ Date: 11/ any 31, 2013 Signature:

- 2 -

### DECLARATION AND ASSIGNMENT FOR UTILITY PATENT APPLICATION

Patent Application Title: CLASSIFYING CLIENT DEVICES IN A NETWORK

the patent application for which:

is being filed concurrently herewith, Application Number to be assigned by the USPTO, or
 was filed on \_\_\_\_\_\_\_ as United States Application Number \_\_\_\_\_\_ or PCT International
 Application Number \_\_\_\_\_\_\_,

Declaration of Inventor

As a below named inventor, I hereby declare that:

- A. I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought by the above-identified patent application;
- B. The above-identified application was made or authorized to be made by me; and
- C. I hereby acknowledge that any willful false statements made in this declaration are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

Inventor Assignment Acknowledgement

For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:

- A. I have sold, assigned and transferred (directly or indirectly), and by this agreement do hereby sell, assign, and transfer, to the Verizon legal entity identified below ("Assignee") and its successors and assigns, my entire worldwide right, title and interest in and to any and all ideas, inventions, methods and improvements which are described in the above-identified patent application, and in and to said application, and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional, and all other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said ideas, inventions, methods and improvements, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
- B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that, when requested, without charge to, but at the expense of, said Assignee, its successors and/or assigns, to carry out in good faith the intent and purpose of this agreement, I will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other applications or registrations included within the Patent Rights; (iii) to execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights; (iv) to communicate to said Assignee, its successors, assigns, representatives and agents, all facts known to the undersigned relating to said Patent Rights and the history thereof; and (v) to generally do everything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.

- 1 -

- C. I covenant with Assignce, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.
- ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US

IN WITNESS to my agreement to the foregoing, I have executed as set forth below:

Full legal name of Inventor: Mimi K. TAM

Mailing Address: 7 Muscatanipus Road, Brookline, NJ 03033, U.S.A.

5/23/2013 Signature: Date:

- 2 -

## PATENT REEL: 030527 FRAME: 0876

## **RECORDED: 05/31/2013**