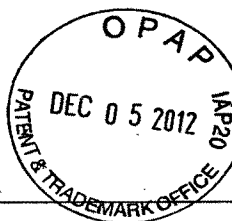


Mail Stop  
Customer  
Randolph  
401 Dula  
Alexandr

12/10/2012



103652479



Atty. Docket No.: 29250-002632/US  
Page 1 of 1

**RECORDATION FORM COVER SHEET**

**To the Honorable Commissioner of Patents and Trademarks:**  
**Please record the attached original documents or copy thereof.**

1. Name of conveying party(ies):

**Katherine GUO**

**Thomas WOO**

Additional name(s) of conveying party(ies) attached?

☐ YES ☒ NO

2. Name and address of receiving party(ies)

Name: Alcatel-Lucent USA Inc.

Street Address: 600-700 Mountain Avenue

City: Murray Hill

State: New Jersey

Country: USA

Postal Code: 07974

3. Nature of conveyance:

☒ Assignment ☐ Merger ☐ Security Agreement

☐ Change of Name ☐ Other:

Execution Date: 1) October 16, 2012 & 2) October 26, 2012

Additional name(s) & address(es) attached? ☐ YES ☒ NO

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s).

**13/622,065**

B. Patent No.(s).

Additional numbers attached? ☐ YES ☒ NO

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: **HARNESS, DICKEY & PIERCE, P.L.C.**

Street Address: **P.O. BOX 8910**

City: **RESTON** State: **VA** ZIP: **20195**

Country: **USA**

6. Total No. of applications/patents involved: **One (1)**

7. Total fee (37 C.F.R. § 3.41): **\$40.00**

☒ Enclosed

☒ Authorized to be charged to deposit account, **if no fee attached.**

8. Deposit account number: **08-0750**

(Attach triplicate copy of this page if paying by deposit account)

**DO NOT USE THIS SPACE**

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

**Gary D. Yacura/35,416**

Name of Person Signing/Reg. No.

Signature

01 FC:0021

**December 5, 2012**

Date

**40.00 DP**

Total number of pages including cover sheet, attachments, and document: seven (7)

**PATENT**  
**REEL: 029554 FRAME: 0623**

## ASSIGNMENT AND AGREEMENT

For value received, we, **Katherine GUO** of **Scotch Plains** in County of **Union** and State of **New Jersey** and **Thomas WOO** of **Short Hills** in County of **Essex** and State of **New Jersey**, hereby sell, assign and transfer to Alcatel-Lucent USA Inc., a corporation of the State of Delaware, having an office at 600-700 Mountain Avenue, Murray Hill, NJ 07974, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to **METHODS FOR ALLOCATING AND SCHEDULING UPLINK AND DOWNLINK TRANSMISSIONS AND APPARATUSES THEREOF** described in an application for Letters Patent of the United States, executed by us of even date herewith, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Alcatel-Lucent USA Inc. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Alcatel-Lucent USA Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Alcatel-Lucent USA Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Alcatel-Lucent USA Inc. in the United States and in all countries foreign to the United States, or to such nominees as Alcatel-Lucent USA Inc. may designate.

We agree that, when requested, I shall, without charge to Alcatel-Lucent USA Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Katherine Guo  
Katherine GUO

Date: 10/16/2012

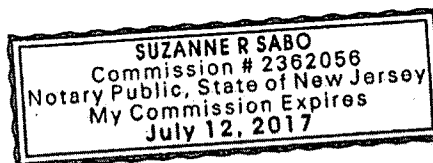
United States of America

State of New Jersey

County of Union

On this 16<sup>th</sup> day of OCTOBER, 2012 before me personally came Katherine Guo, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Suzanne R. Sabo  
Notary Public



Alcatel-Lucent USA Inc.  
600 Mountain Avenue (Room 3D-201)  
P. O. Box 636  
Murray Hill, New Jersey 07974-0636

\_\_\_\_\_  
Thomas WOO

Date: \_\_\_\_\_

United States of America

State of \_\_\_\_\_

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally  
came \_\_\_\_\_, to me known to be the individual described in and who executed  
the foregoing instrument, and acknowledged execution of the same.

\_\_\_\_\_  
Notary Public

Alcatel-Lucent USA Inc.  
600 Mountain Avenue (Room 3D-201)  
P. O. Box 636  
Murray Hill, New Jersey 07974-0636

## ASSIGNMENT AND AGREEMENT

For value received, we, **Katherine GUO** of **Scotch Plains** in County of **Union** and State of **New Jersey** and **Thomas WOO** of **Short Hills** in County of **Essex** and State of **New Jersey**, hereby sell, assign and transfer to Alcatel-Lucent USA Inc., a corporation of the State of Delaware, having an office at 600-700 Mountain Avenue, Murray Hill, NJ 07974, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to **METHODS FOR ALLOCATING AND SCHEDULING UPLINK AND DOWNLINK TRANSMISSIONS AND APPARATUSES THEREOF** described in an application for Letters Patent of the United States, executed by us of even date herewith, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Alcatel-Lucent USA Inc. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Alcatel-Lucent USA Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Alcatel-Lucent USA Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Alcatel-Lucent USA Inc. in the United States and in all countries foreign to the United States, or to such nominees as Alcatel-Lucent USA Inc. may designate.

We agree that, when requested, I shall, without charge to Alcatel-Lucent USA Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

\_\_\_\_\_  
**Katherine GUO**

Date: \_\_\_\_\_

United States of America

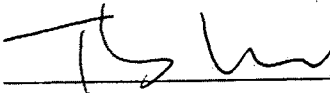
State of \_\_\_\_\_

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally  
came \_\_\_\_\_, to me known to be the individual described in and who executed  
the foregoing instrument, and acknowledged execution of the same.

\_\_\_\_\_  
Notary Public

Alcatel-Lucent USA Inc.  
600 Mountain Avenue (Room 3D-201)  
P. O. Box 636  
Murray Hill, New Jersey 07974-0636

  
Thomas WOO

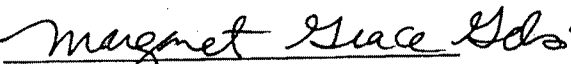
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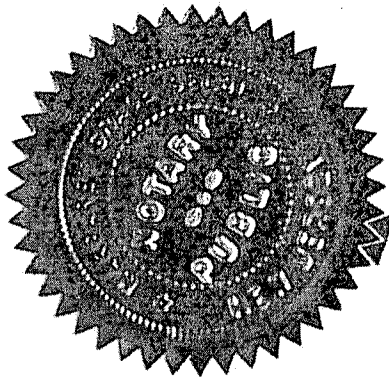
United States of America

State of NJ

County of Union

On this 26th day of October, 2012, before me personally came Thomas WOO, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

  
Notary Public



**Margaret Grace Gelsi  
A Notary Public of New Jersey  
My Commission Expires  
April 14, 2014**

Alcatel-Lucent USA Inc.  
600 Mountain Avenue (Room 3D-201)  
P. O. Box 636  
Murray Hill, New Jersey 07974-0636