

05/11/2011

Form PTO-1595 (Rev. 01-09)
OMB No. 0651-0027 (exp. 02/28/2009)



U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

RECO 103628999

corr. 5/11/11

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

<p>1. Name of conveying party(ies): Kai Yang (01/24/2011), Chan-Byoung Chae (01/24/2011), Doru Calin (01/24/2011), Denis Rouffet (01/18/2011), and</p> <p>Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies) Name: <u>Alcatel-Lucent USA Inc.</u> Internal Address: _____ Street Address: _____ 600-700 Mountain Avenue City: <u>Murray Hill</u> State: <u>New Jersey</u> Country: <u>United States of America</u> Zip: <u>07974</u> Additional name(s) & address(es) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>3. Nature of conveyance/Execution Date(s): Execution Date(s): <u>In parentheses after inventor name</u></p> <p><input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input checked="" type="checkbox"/> Other: Corrective Assignment to add fourth inventor and second Assignee at reel/frame 025964/0110</p>	<p>4. Application or patent number(s): <input checked="" type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>13/010,262</u> B. Patent No.(s) _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Gary D. Yacura</u> <u>HARNES, DICKEY & PIERCE, P.L.C.</u> Internal Address: <u>Atty. Dkt.: 29250-002520/US</u> Street Address: <u>P.O. Box 8910</u> City: <u>Reston</u> State: <u>VA</u> Zip: <u>20195</u> Phone Number: <u>(703) 668-8000</u> Fax Number: <u>(703) 668-8200</u> Email Address: <u>dcmalroom@hdp.com</u></p>	<p>5. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>40.00</u></p> <p><input type="checkbox"/> Authorized to be charged to deposit account <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)</p> <p>6. Payment Information Deposit Account Number _____ Authorized User Name _____</p>
<p>9. Signature: Signature <u>Gary D. Yacura - 35,416</u> Name of Person Signing</p> <p>March 31, 2011 05/19/2011 AMULLINS 00000201 080750 13010262 01 Total number of pages including cover sheet, attachments, and documents: <u>12</u></p>	

RECORDATION FORM COVER SHEET (PTO-1595)
(supplemental sheet)

Additional Conveying Party(ies)/Execution Date(s) (1. Continued):

Simon Yiu (01/24/2011)

Additional Assignees (2. Continued):

Assignee Name: Alcatel-Lucent

Internal Address:

Street Address: 3 avenue Octave Greard
75007 Paris
FRANCE

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Additional Applications and/or Patents (4. Continued):

Additional Patent Application Numbers
4A. Continued:

Additional Patent Numbers
4B. Continued:

Additional numbers attached?

Yes

No

1147447.1

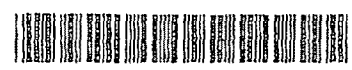
FORM PTO-1595
Rev 6-93
OMB-0851-0011

DEPARTMENT OF COMMERCE
Patent and Trademark Office

RE 3/15/11

RECORDATION INFORMATION
PATENT

03/16/2011



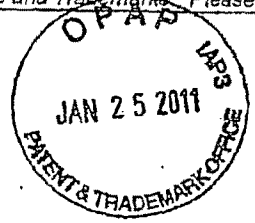
103620064

29250-002520/1

To the Honorable Commissioner of Patents and Trademarks, Please record

1/25/11

1. Name of conveying party(ies):
Kai YANG
Chan-Byoung CHAE
Doru CALIN
Simon YIU
Additional name(s) of conveying party(ies) attached? Yes No



2. Name and address of receiving party(ies).
Name: Alcatel-Lucent USA Inc.
Internal Address: _____
Street Address: 600-700 Mountain Avenue
City: Murray Hill State: NJ Zip: 07974

3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other

Additional name(s) & address(es) attached? Yes No

Execution Date: 1/24/2011; 1/24/2011; 1/24/2011; 1/24/2011

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) 13/010,262
Additional numbers attached? Yes No

6. Total number of applications and patents involved:
7. Total fee (37 CFR 3.41) \$ \$40.00
 Enclosed
 Authorized to be charged to deposit account
8. Deposit account number: 08-0750
(Attach duplicate copy of this page if paying by deposit account)

5. Name and address of party to whom correspondence concerning document should be mailed.
Name: Harness, Dickey & Pierce, P.L.C.
Internal Address:
Street Address: P.O. Box 8910
City: Reston State: VA Zip: 20195

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. Yacufa Reg. No. 56,205 Registration No. 35,416
Total number of pages including cover sheet, attachments and document. 4
Date: January 25, 2011
HTON11 08000000 13010262 40.00 OP

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D. C. 20231

PATENT

Attorney Docket No.: 29250-002520/US
Alcatel-Lucent Ref. No.: 806711-US-NP

ASSIGNMENT AND AGREEMENT

For value received, we, Kai Yang of Belle Mead in County of Somerset and State of New Jersey; Chan-Byoung Chae of Jersey City in County of Hudson and State of New Jersey; Doru Calin of Manalapan in County of Monmouth and State of New Jersey and Simon Ylu of Jersey City in County of Hudson 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 REDUCING INTERFERENCE IN A COMMUNICATION SYSTEM** 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.

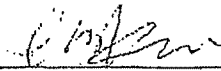
We authorize Alcatel-Lucent USA Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization 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, we 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.

Attorney Docket No.: 29250-002520/US
Alcatel-Lucent Ref. No.: 806711-US-NP



Kai YANG

Date: Jan 24th / 2011

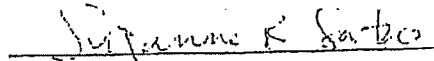
United States of America

State of New Jersey

County of Somerset

On this 24th day of January, 2011, before me personally came Kai Yang, 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 - State of NJ
Commission No. 2362056
My Commission Expires 7/12/2012


Notary Public

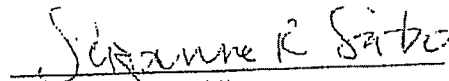
Date: Jan 24 / 2011

United States of America

State of New Jersey

County of Hudson

On this 24th day of January, 2011, before me personally came Chan-Byoung Chae, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.


Chan-Byoung CHAE
Notary Public

Suzanne R. Sabo
Notary Public - State of NJ
Commission No. 2362056
My Commission Expires 7/12/2012

Attorney Docket No.: 29250-002520/US
Alcatel-Lucent Ref. No.: 806711-US-NP

Don Calin

Don CALIN

Date: Jan 24, 2011

United States of America

State of New Jersey

County of Monmouth

On this 24th day of January, 2011, before me personally came Doru Calin 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 - State of NJ
Commission No. 2362056
My Commission Expires 7/12/2012

Suzanne R. Sabo
Suzanne R. Sabo
Notary Public

Simon YIU
Simon YIU

Date: Jan 24, 2011

United States of America

State of New Jersey

County of Hudson

On this 24th day of January, 2011, before me personally came Simon YIU to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

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

Suzanne R. Sabo
Notary Public - State of NJ
Commission No. 2362056
My Commission Expires 7/12/2012

ASSIGNMENT

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

METHODS FOR REDUCING INTERFERENCE IN A COMMUNICATION SYSTEM

for which Assignor is about to make or has made United States or International application for patent

- (a) executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
- (b) executed on _____, _____, _____; or
- (c) filed on _____, and assigned Serial No. _____ or PCT International Application No. _____; and

WHEREAS, Alcatel-Lucent, 3, avenue Octave Gréard, 75007 Paris, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue, the Letters Patent, Utility Model Registration or other similar right to Assignee.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

ASSIGNMENT



Denis ROUFFET

Dated

18th Jan, 2011

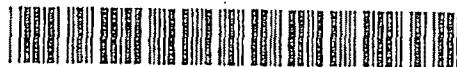


UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MARCH 17, 2011

PTAS



103620064A

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 03/15/2011

REEL/FRAME: 025964/0110
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
YANG, KAI

DOC DATE: 01/24/2011

ASSIGNOR:
CHAE, CHAN-BYOUNG

DOC DATE: 01/24/2011

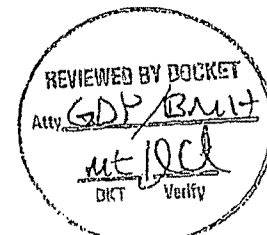
ASSIGNOR:
CALIN, DORU

DOC DATE: 01/24/2011

ASSIGNOR:
YIU, SIMON

DOC DATE: 01/24/2011

ASSIGNEE:
ALCATEL-LUCENT USA INC.
600-700 MOUNTAIN AVENUE
MURRAY HILL, NEW JERSEY 07974



29250-00252
Matter No.