FORM PTO-1595
Rev.6-93
OMB-0651-0011

9. Statement and signature

Gary D. Yacura

true copy of the original document.

OP A D 2012 MAY 0 1 2012 M

RECORDATION FORM COVEL PATENTS ONLY

05/03/2012



To the Honorable Commissioner of Patents and Trademarks: Please record the attached original 103644022					
1. Name of conveying parties:	Name and address of receiving party(ies):				
LiLi	Name: Alcatel-Lucent USA Inc.				
Sungro Yoon	Internal Address:				
Michael Zierdt					
Additional name(s) of conveying party(ies) attached? ☐ Yes ⊠No	Street Address: 600 Mountain Ave				
3. Nature of conveyance:	City: Murray Hill State: NJ Zip: 07974				
□ Merger	Additional name(s) & address(es) attached? ☐ Yes ☒ No				
☐ Security Agreement ☐ Change of Name	, tadational name(e) a dadress(es) ditadress:				
☐ Other					
Execution Date: April 25, 2012, April 19, 2012, April 25, 2012					
4. Application number(s) or patent number(s):	`				
If this document is being filed together with a new application, the exe	ecution date of the application is				
A, Patent Application No.(s)	B. Patent No. (s)				
13/416,050					
Additional numbers attack	ned? ☐ Yes ⊠ No				
'					
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1				
Name: Harness, Dickey & Pierce, P.L.C.	7. Total fee (37 CFR 3.41) \$ \$40.00				
Internal Address:					
Street Address: P.O. Box 8910	Authorized to be charged to deposit account				
	81 FC:8921 - 40.00 UP				
City: Reston State: VA Zip: 20195	8. Deposit account number: 08-0750				
	(Attach duplicate copy of this page if paying by deposit account)				
DO NOT USE THIS SPACE					

Total number of pages including cover sheet, attachments, and document:

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D. C. 20231

35,416

Registration No.

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

PATENT REEL: 028206 FRAME: 0587

May 1, 2012

Date

Attorney Docket No. 29250-002603/US Alcatel-Lucent Ref. No. 810928-US-NP

ASSIGNMENT AND AGREEMENT

For value received, we, Li Li of Edison in County of Middlesex and State of New Jersey, Sungro Yoon of _ _____ in County of _ _____ and State of , and Michael Zierdt of Hillsborough in County of Somerset 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 METHOD AND **APPARATUS** FOR DETERMINING AVAILABLE BANDWIDTH FOR WIRELESS COMMUNICATION 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.

REEL: 028206 FRAME: 0588

ALCATEL-LUCENT At 04/25/12 11:37:34 AM Page 5From Li, Li (Li)

Attorney Docket No. 29250-002603/US Alcatel-Lucent Ref. No. 810928-US-NP

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	Date: 4/25/2012	,	Li Li	,	Contract of		
	United States of America						
	State of New Ser	sed					
	County of Union				VE EXP		
	1	n	Arric	. (1	"CALLIERS"		
	Came Li Li , to	day of o me known to	be the individua	, 20 <u>/2</u> , before I described in and	me personally who executed		
	the foregoing instrument, and acknowledged execution of the same.						
			· Sur	anse R	Sato		
	Suzanne R. Sabo	of NJ	Not	ary Public	0 = 1		
	Notary Public - State of NJ Notary Public - State of NJ Commission No. 2362056						
Му	Commission Expires 7	/ ZIZO I =					
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			Sungro Yo	on	*		
	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.						
	•	,					
			Not	ary Public			

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Attorney Docket No. 29250-002603/US Alcatel-Lucent Ref. No. 810928-US-NP

Date: 4/25/12

Michael G. Zierdt

United States of America

State of New Sersed

County of Uhion

Notary Public

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

(HDP - From: ALCATEL-LUCENT

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

REEL: 028206 FRAME: 0590

ASSIGNMENT AND AGREEMENT

For value received, we, Li Li of Edison in County of Middlesex and State of New Jersey, Sungro Yoon of Releigh in County of Wake and State of North Carolina, and Michael Zierdt of Hillsborough in County of Somerset 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 METHOD AND APPARATUS FOR DETERMINING AVAILABLE BANDWIDTH FOR WIRELESS COMMUNICATION 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.

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Attorney Docket No. 29250-002603/US Alcatel-Lucent Ref. No. 810928-US-NP

Li Li					
Date:					
United States of America					
State of					
County of					
On thisday of, to me known to who executed the foregoing instrument, and acknowle	be the individual described in and				
	Notary Public				
	don				
Summer	Vann				
Date: Apr. 1 19, 2012	Yoon Yoon				
United States of America					
State of North Carolina,					
County of Wake					
On this 19th day of 1900 personally came 50ngre 4000, to me known to who executed the foregoing instrument, and acknowledge	, 2017, before me be the individual described in and edged execution of the same.				
2	Yomarch Deroce Notary Public Pamarah Gerace My rommission expines: 3-26-2017				

PATENT REEL: 028206 FRAME: 0592

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