PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Patricia Ruey-Jane CHANG	12/20/2010
Vikram K. RAWAT	12/21/2010
Jay J. LEE	12/20/2010
Deepak KAKADIA	12/20/2010
Lee K. TJIO	12/21/2010
David CHIANG	12/20/2010

RECEIVING PARTY DATA

Name:	VERIZON PATENT AND LICENSING INC.
Street Address:	One Verizon Way
City:	Basking Ridge
State/Country:	NEW JERSEY
Postal Code:	07920

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12975965

CORRESPONDENCE DATA

(571)432-0808 Fax Number:

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

571-432-0800 Phone:

Email: cpammel@harrityllp.com Correspondent Name: Harrity & Harrity, LLP Address Line 1: 11350 Random Hills Rd.

Address Line 2: Suite 600

Address Line 4: Fairfax, VIRGINIA 22030

ATTORNEY DOCKET NUMBER: 20100724

PATENT

REEL: 025762 FRAME: 0102 501429922

NAME OF SUBMITTER:	Thomas W. Edman		
Total Attachments: 10			
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ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I/We, the undersigned:

I. have sold, assigned and transferred, and by the presents do hereby sell, assign, and transfer, to the Verizon legal entity identified below ("Assignee") and its successors and assigns, the entire worldwide right, title and interest in and to any and all improvements which are described in the application for United States Letters Patent entitled

GLOBAL REAL-TIME NETWORK RESOURCE A	AND TIMER SYNCHRONIZATION	
Which has been executed by the under I/we hereby authorize and request the Assignee, its suit insert here in the parentheses (Application Number 12/date and application number of said application when known in the parenthese in the parenthese in the parenthese (Application Number 12/date).	ersigned concurrently herewith, and in which case ccessors, assigns and/or legal representatives, to (975, 965, filed December 22, 2010) the filing wn.	
which was filed on and a	ssigned Application No.	
and in and to said application, and all divisional, continuissue, provisional, and all other applications for Letter United States and all foreign countries on any of said impapplication; and in and to all original and reissued patents States and foreign countries from any of said applications the filing of any of said applications; and in and to all Convention for the Protection of Industrial Property to any	s Patent which have been or shall be filed in the rovements or based on or claiming priority to said which have been or shall be issued in the United, and in and to all rights of priority resulting from rights which may exist under the International	
II. agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for Letters Patent and all Letters Patent on said improvements, in said Assignee, its successors and assigns; and		
III. covenant with said Assignee, its successors, assigns and le mortgage, license, or other agreement affecting the rights others by the undersigned, and that full right to convey the undersigned.	and property herein identified has been made to	
IN WITNESS to my/our agreement to the foregoing, I/we have executed the second	cuted this Assignment as set forth below:	
Verizon entity (Assignee): Verizon Patent and Licensing Inc., having Basking Ridge, NJ 07920.	ng a place of business at One Verizon Way,	
ASSIGNORS: Signature: Patricia Ruey-Jane CHANG Da	te: 12/10/10	
Signature: Da Vikram K. RAWAT	te:	
Signature: Da Jay J. LEE	te:	
	(e)	

Signature:		Date:	•
	Lee K. TJIO		
Signature:		Date:	
	David CHIANG		

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GLOBAL REAL-TIME NETWORK RESOURCE AND TIMER SYNCHRONIZATION

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insert here in	authorize and request the Assignee, i	tundersigned concurrently herewith, and in which case its successors, assigns and/or legal representatives, to 12/975,965, filed December 22, 2010 the filing in known.
	which was filed on	and assigned Application No.
reissue, provi United States application; a States and for the filing of	sional, and all other applications for I and all foreign countries on any of said and in and to all original and reissued p reign countries from any of said applica-	continuing (in whole or in part), substitute, renewal Letters Patent which have been or shall be filed in the d improvements or based on or claiming priority to said atents which have been or shall be issued in the United ations, and in and to all rights of priority resulting from to all rights which may exist under the International to any of the foregoing;
II. agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, declarations, assignments, power of attorney and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to undersigned relating to said improvements and the history thereof; and generally decverything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting tith to said improvements and all applications for Letters Patent and all Letters Patent on said improvements, in said Assignee, its successors and assigns; and		
mortgage, lic	ense, or other agreement affecting the	and legal representatives that no assignment, gran- rights and property herein identified has been made t nvey the same as herein expressed is possessed by th
IN WITNESS to my/o	our agreement to the foregoing, I/we have	ve executed this Assignment as set forth below:
Verizon entity (Assign Basking Ridge, NJ 07		., having a place of business at One Verizon Way,
ASSIGNORS:		
Signature:		Date:
Signature:	icia Rusy-Jane CHANG	Date: 12 21 2011
Signature:		Date:
Jay Signature:	J. LEE	Date:
	pak KAKADIA	pp sales.
•		

Signature:		Date:
	Lee К., ТЛО	_
Signature:		Date:
-	David CHIANG	•

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GLOBAL REAL-TIME NETWORK RESOURCE A	ND TIMER SYNCHRONIZATION	
	ersigned concurrently herewith, and in which case excessors, assigns and/or legal representatives, to 975, 965, filed December 22, 2010) the filing	
which was filed on and a	ssigned Application No.	
and in and to said application, and all divisional, continuous reissue, provisional, and all other applications for Letter United States and all foreign countries on any of said impapplication; and in and to all original and reissued patents States and foreign countries from any of said applications the filing of any of said applications; and in and to all Convention for the Protection of Industrial Property to an	provements or based on or claiming priority to said so which have been or shall be issued in the United s, and in and to all rights of priority resulting from I rights which may exist under the International y of the foregoing;	
II. agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for Letters Patent and all Letters Patent on said improvements, in said Assignee, its successors and assigns; and		
III. covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein identified has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.		
IN WITNESS to my/our agreement to the foregoing, I/we have or	xecuted this Assignment as set forth below:	
Verizon entity (Assignee): Verizon Patent and Licensing Inc., ha Basking Ridge, NJ 07920.	wing a place of business at One Verizon Way,	
ASSIGNORS:		
Signature: Patricia Rucy-Jane CHANG	Date:	
Signature: Vikram K, RAWAT	Date:	
Signature: Vikram K. KAWAI	Date: 12/20/20/0	
Signature: Deepak KAKADIA	Date: 12/20/2010	

Signature:		Date:
	Lee K. TJIO	Date:
Signature:	David CHIANG	

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GLOBAL REAL-TIME NETWORK RESOURCE AND TIMER SYNCHRONIZATION

i)i	/We hereby authorize and request the Assignee, its	undersigned concurrently herewith, and in which case successors, assigns and/or legal representatives, to 12/975, 965, filed December 22, 2010) the filing known.	
	which was filed on ar	nd assigned Application No.	
re U ap St	etssue, provisional, and all other applications for Le Juited States and all foreign countries on any of said pplication; and in and to all original and reissued pat states and foreign countries from any of said application	ontinuing (in whole or in part), substitute, renewal, tters Patent which have been or shall be filed in the improvements or based on or claiming priority to said ents which have been or shall be issued in the United ions, and in and to all rights of priority resulting from all rights which may exist under the International any of the foregoing;	
11. agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for Letters Patent and all Letters Patent on said improvements, in said Assignee, its successors and assigns; and			
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IN WITNE	ESS to my/our agreement to the foregoing, I/we have	executed this Assignment as set forth below:	
Verizon en Basking Ri	ntity (Assignee): Verizon Patent and Licensing Inc., I	naving a place of business at One Verizon Way,	
ASSIGNO	DRS:		
Signature:_	Patricia Ruey-Jane CHANG	Date:	
Signature:_	Vikram K. RAWAT	Date:	
Signature:_		Date:	
Signature:_		Date:	
	Dechar KUVADIA		

Signature:	Ulk.(XW	Date: 12/21/10)
	Lee K. TJIO			
Signature:	71/4		Date;	
	David CHIANG			

ASSIGNMENT

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I. have sold, assigned and transferred, and by the presents do hereby sell, assign, and transfer, to the Verizon legal entity identified below ("Assignee") and its successors and assigns, the entire worldwide right, title and interest in and to any and all improvements which are described in the application for United States Letters Patent entitled

GLOBAL REAL-TIME NETWORK RESOURCE AND TIMER SYNCHRONIZATION

<i>,</i>	and request the As	red by the undersigned concurrently herewith, and in which case signee, its successors, assigns and/or legal representatives, to Number $\frac{12/975,965}{965}$, filed December 22, 2010 the filing tion when known.			
	which was filed on	and assigned Application No.			
	and in and to said application, and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements or based on or claiming priority to said application; and in and to all original and reissued patents which have been or shall be issued in the United States and foreign countries from any of said applications, and in and to all rights of priority resulting from the filing of any of said applications; and in and to all rights which may exist under the International Convention for the Protection of Industrial Property to any of the foregoing;				
II. agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing (in whole or in part), substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for Letters Patent and all Letters Patent on said improvements, in said Assignee, its successors and assigns; and					
•	moregues, necesso, or order agreement arrect	assigns and legal representatives that no assignment, grant, ing the rights and property herein identified has been made to at to convey the same as herein expressed is possessed by the			
IN WITN	IESS to my/our agreement to the foregoing, I	/we have executed this Assignment as set forth below:			
Verizon e		ing Inc., having a place of business at One Verizon Way,			
ASSIGNO	ORS:				
Signature	:	Date:			
Signature	Patricia Ruey-Jane CHANG				
oignature.	Vikram K. RAWAT	Date:			
Signature	Main K. KAWAI	Date			
	Jay J. LEE	Date:			
Signature:	: Deepak KAKADIA	Date:			

Signature:		Date:
Signature:	Lee K. THO A My	Date: 12/20/2010

PATENT REEL: 025762 FRAME: 0113

RECORDED: 12/22/2010