PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mohammad Reza Shafiee	12/09/2010
Wei Liu	12/09/2010
Puneet Kalia	12/14/2010
Ashutosh K. Sureka	12/13/2010
Rahim Charania	12/10/2010
Shuchi Patel	12/14/2010

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:	12971029

CORRESPONDENCE DATA

Fax Number: (703)439-2658

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

Phone: 5712970007
Email: pto@snyderllp.com

Correspondent Name: Snyder, Clark, Lesch & Chung, LLP

Address Line 1: 950 Herndon Parkway

Address Line 2: Suite 365

Address Line 4: Herndon, VIRGINIA 20170

NAME OF SUBMITTER: Glenn Snyder

PATENT

REEL: 025516 FRAME: 0128

\$40.00 129/1029

501382356

Total Attachments: 6 source=20100560_Signed_Assignment_0021_0228#page1.tif source=20100560_Signed_Assignment_0021_0228#page2.tif source=20100560_Signed_Assignment_0021_0228#page3.tif source=20100560_Signed_Assignment_0021_0228#page4.tif source=20100560_Signed_Assignment_0021_0228#page5.tif

source=20100560_Signed_Assignment_0021_0228#page6.tif

Verizon Invention Assignment for Verizon Reference No.: 20100560

Page 1 of 2

ASSIGNMENT

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

9081662321

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

RESOURCE MANAGER		
Which has been executed by the undersigned concurrently herewith, and in which case I/we hereby authorize and request the Assignee, its successors, assigns and/or legal representatives, to insert here in the parentheses (Application Number 12/971,029 , filed December 17, 2010) the filing date and application number of said application when known.		
which was filed un 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 Assignce 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 Assignce, 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 ouths, 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 executed this Assignment as act forth below;		
Verizon entity (Assignee): Verizon Patent and Licensing Inc., having a place of business at One Verizon Way, Basking Ridge, NJ 07920.		
ASSIGNORS: Signature: 10 /01 / 90/0 Mohariwaad Recal Shuffice		
Signature: Date:		
Signature: Date:		

Verizon Invention Assignment for Verizon Reference No.: 20100560 Page 2 of 2

Signature:	Date:
Ashutosh Sureka Signature: Rahim Charania	
Signature:	Date:
Shuchi Patel	

Verizon Invention Assignment for Verizon Reference No.: 20100560 Page 1 of 2

ASSIGNMENT

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

 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

RESOURCE MANAGER

Which has been executed by the undersigned concurrently herewith, and in which case I/we hereby authorize and request the Assigned, its successors, assigns and/or legal representatives, to insert here in the parentheses (Application Number 12/971,029, filed December 17, 2010) the filing date and application number of said application 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, relastic, 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:		
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		
III. covenant with said Assignce, 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 executed this Assignment as set forth below:		
Verizon entity (Assignee): Verizon Patent and Licensing Inc., having a place of business at One Verizon Way, Basking Ridge, NJ 07920.		
ASSIGNORS:		
Signature: Date: Date:		
Signature: Date: Date: Date:		
Signature: Date:		

Verizon Invention Assignment for Verizon Reference No.: 20100560 Page 2 of 2

Verizon Invention Assignment for Verizon Reference No.: 20100560 Page 1 of 2

ASSIGNMENT

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

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

DESCRIBER MANAGER

RESOURCE MANAGER		
[which has been executed by the under I/we hereby authorize and request the Assignee, its successive there in the parentheses (Application Number 12/s) date and application number of said application when known	971,029 filed December 17, 2010 the filing	
which was filed on and ass	signed Application No.	
and in and to said application, and all divisional, continuous reissue, provisional, and all other applications for Letters United States and all foreign countries on any of said improphication; 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	Patent which have been or shall be filed in the overnents 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 Patithat, when requested, without charge to, but at the expensional representatives, to carry out in good faith the intent a will execute all divisional, continuing (in whole or in part), applications on any and all said improvements; execute all of attorney and other papers; communicate to said Assignee facts known to undersigned relating to said improvement everything possible which said Assignee, its successors, as for siding in securing and maintaining proper patent protes to said improvements and all applications for Letters Patentsaid Assignee, its successors and assigns; and	se of, said Assignee, its successors, assigns and purpose of this Assignment, the undersigned a substitute, renewal, reissue, and all other patent rightful oaths, declarations, assignments, powers its successors, assigns, and representatives, all ents and the history thereof; and generally dossigns or representatives shall consider desirable often for said improvements and for vesting title	
fill. coverant 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 executed this Assignment as set forth below:		
Verizon entity (Assignee): Verizon Patent and Licensing Inc., having a place of business at One Verizon Way, Basking Ridge, NJ 07920.		
ASSIGNORS:		
Signature: Da Mohammad Reza Shafiee	ite:	
Signature: Da	ate:	
	ate: 12/14/2010	

FAX NO. : 04044005001

PATERY NOZIABY: MORT

REEL: 025516 FRAME: 0134

Verizon Invention Assignment for Verizon Reference No.: 20100560 Page 2 of 2

Signature:	Date:
Ashutosh Sureka	
Signature:	Date:
Rahim Charania	
Signature: Shuchi Patal	Date: 12/14/2010
Shuchi Patel	

PATENT REEL: 025516 FRAME: 0135

RECORDED: 12/17/2010