# 503060342 11/13/2014

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT		
IATURE OF CONVEY	ANCE:	ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY	DATA				
		Name		Execution Date	
ROSS BOTT				10/06/2014	
MICHAEL LUNA				08/25/2014	
RECEIVING PARTY D	ΑΤΑ				
Name:	SEVEN	NETWORKS, INC			
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Internal Address:	SUITE	100			
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State/Country:	CALIFC	RNIA			
Postal Code:	94070				
	S Total: 2				
Property Typ		Number			
Application Number:		13758906			
PCT Number:		US1324664			
CORRESPONDENCE					
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TTORNEY DOCKET	NUMBER:	455/128/1 UTIL AND	PCT		
NAME OF SUBMITTER:		JUSTIN R. NIFONG			
SIGNATURE:		/Justin R. Nifong/	/Justin R. Nifong/		
DATE SIGNED: 11/13/2014					
Fotal Attachments: 13		I			
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#### **DECLARATION AND ASSIGNMENT OF RIGHTS**

As a below named inventor (hereinafter designated as the undersigned or the Assignor, where appropriate), I hereby declare that:

The application is as identified by the attorney docket number, title, Filing Date, or Application Title as set forth in the following Table I:

The application in Table I was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application in Table I.

The undersigned hereby acknowledges that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

	Application		
Attorney Ref No.	No.	Title	FilingDate
		SINGLE ACTION ACCESS TO	
		CONTEXT SPECIFIC CONTENT AT A	
455/115/1 UTIL	13/360,470	MOBILE DEVICE	1/27/2012
		SOCIAL CACHING FOR DEVICE	
		RESOURCE SHARING AND	
455/118/1 UTIL	13/451,340	MANAGEMENT	4/19/2012
		SYSTEM AND METHOD FOR A	
		MOBILE DEVICE TO USE PHYSICAL	
		STORAGE OF ANOTHER DEVICE FOR	
455/118/2 UTIL	13/554,859	CACHING	7/20/2012
		SYSTEM AND METHOD FOR A	
		MOBILE DEVICE TO USE PHYSICAL	
		STORAGE OF ANOTHER DEVICE FOR	
455/118/3 UTIL	13/740,785	CACHING	1/14/2013
		DEVICE RESOURCES SHARING FOR	
		NETWORK RESOURCE	
455/119/1 UTIL	13/451,361	CONSERVATION	4/19/2012
		USER AS AN END POINT FOR	
		PROFILING AND OPTIMIZING THE	
		DELIVERY OF CONTENT AND DATA	
455/124/1 UTIL	13/758,842	IN A WIRELESS NETWORK	2/4/2013
		DYNAMIC CATEGORIZATION OF	
		APPLICATIONS FOR NETWORK	
455/128/1 UTIL	13/758,906	ACCESS IN A MOBILE NETWORK	2/4/2013

#### TABLE I

1	1	1	۲ ۲
		WIRELESS NETWORK TRAFFIC	
		ROUTING THROUGH TRAFFIC	
		OPTIMIZATION AND TRACKING OF	
		DESTINATION ADDRESS TO	
		FACILITATE SERVICE PROVIDER	
455/135/1 UTIL	13/900,516	BILLING	5/22/2013
		FACILITATION OF MOBILE	
		OPERATOR BILLING BASED ON	
		WIRELESS NETWORK TRAFFIC	
		MANAGEMENT AND TRACKING OF	
		DESTINATION ADDRESS IN	
		CONJUNCTION WITH BILLING	
455/135/2 UTIL	13/900,492	POLICIES	5/22/2013
		DETECTION AND MANAGEMENT OF	
		USER INTERACTIONS WITH	
		FOREGROUND APPLICATIONS ON A	
		MOBILE DEVICE IN DISTRIBUTED	
455/136/1 UTIL	13/735,868	CACHING	1/7/2013
		MANAGING CACHE TO PREVENT	
		OVERLOADING OF A WIRELESS	
455/136/2 UTIL	13/912,067	NETWORK DUE TO USER ACTIVITY	6/6/2013
		MONITORING MOBILE APPLICATION	
		ACTIVITIES FOR MALICIOUS	
455/137/1 UTIL	13/546,995	TRAFFIC ON A MOBILE DEVICE	7/11/2012
		AUTOMATIC GENERATION AND	
		DISTRIBUTION OF POLICY	
		INFORMATION REGARDING	
		MALICIOUS MOBILE TRAFFIC IN A	
455/137/2 UTIL	13/547,001	WIRELESS NETWORK	7/11/2012
		PARENTAL CONTROL OF MOBILE	
455/140/1 UTIL	13/560,002	CONTENT ON A MOBILE DEVICE	7/27/2012
		MOBILE DEVICE USAGE CONTROL IN	
		A MOBILE NETWORK BY A	
455/140/2 UTIL	13/560,092	DISTRIBUTED PROXY SYSTEM	7/27/2012
		INTELLIGENT PLACEMENT AND	
		DELIVERY OF MOBILE	
		ADVERTISEMENTS AND	
		ELECTRONIC COUPONS VIA A	
		DISTRIBUTED SYSTEM IN A MOBILE	
455/141/1 UTIL	13/572,582	NETWORK	8/10/2012
		STRATEGICALLY TIMED DELIVERY	
		OF ADVERTISEMENTS OR	
		ELECTRONIC COUPONS TO A	
		MOBILE DEVICE IN A MOBILE	
455/141/2 UTIL	13/572,598	NETWORK	8/10/2012
		INTELLIGENT CUSTOMER	
		SERVICE/CALL CENTER SERVICES	
		ENHANCED USING REAL-TIME AND	
		HISTORICAL MOBILE APPLICATION	
455/142/1 UTIL	13/860,332	AND TRAFFIC-RELATED STATISTICS	4/10/2013

		COLLECTED BY A DISTRIBUTED	
		CACHING SYSTEM IN A MOBILE	
		NETWORK	
		ENHANCED CUSTOMER SERVICE	
		FOR MOBILE CARRIERS USING	
		REAL-TIME AND HISTORICAL	
		MOBILE APPLICATION AND TRAFFIC	
		OR OPTIMIZATION DATA	-
		ASSOCIATED WITH MOBILE DEVICES	
455/142/2 UTIL	13/860,403	IN A MOBILE NETWORK	4/10/2013
		Mobile Device And Method To Utilize The	
		Failover Mechanism For Fault Tolerance	
		Provided For Mobile Traffic Management	
455/145/2 UTIL	13/706,860	And Network/Device Resource	12/6/2012
		HIERARCHIES AND CATEGORIES	
		FOR MANAGEMENT AND	
		DEPLOYMENT OF POLICIES FOR	
		DISTRIBUTED WIRELESS TRAFFIC	
455/147/1 UTIL	13/715,801	OPTIMIZATION	12/14/2012
		HIERARCHIES AND CATEGORIES	
		FOR MANAGEMENT AND	
		DEPLOYMENT OF POLICIES FOR	
		DISTRIBUTED WIRELESS TRAFFIC	
455/147/2 UTIL	14/470,418	OPTIMIZATION	8/27/2014
		MOBILE NETWORK REPORTING AND	0.27.2011
		USAGE ANALYTICS SYSTEM AND	
		METHOD AGGREGATED USING A	
		DISTRIBUTED TRAFFIC	
455/148/1 UTIL	13/710,274	OPTIMIZATION SYSTEM	12/10/2012
		SYSTEM AND METHOD FOR	
		GENERATING A REPORT TO A	
		NETWORK OPERATOR BY	
		DISTRIBUTING AGGREGATION OF	
455/148/2 UTIL	13/710,336	DATA	12/10/2012
	1	OPERATION MODES FOR MOBILE	
		TRAFFIC OPTIMIZATION AND	
		CONCURRENT MANAGEMENT OF	
		OPTIMIZED AND NON-OPTIMIZED	
455/149/1 UTIL	13/715,900	TRAFFIC	12/14/2012
		OPTIMIZED AND SELECTIVE	
		MANAGEMENT OF POLICY	
		DEPLOYMENT TO MOBILE CLIENTS	
		IN A CONGESTED NETWORK TO	
		PREVENT FURTHER AGGRAVATION	
455/153/1 UTIL	13/837,308	OF NETWORK CONGESTION	3/15/2013
		SYSTEMS AND METHODS FOR	
		PROVIDING APIS AND API	
		EXTENSIONS TO THIRD PARTY	
455/181 PROV	61/836,112	APPLICATION DEVELOPERS FOR	6/17/2013

		OPTIMIZING AND MINIMIZING APPLICATION TRAFFIC	
		METHODS AND SYSTEMS FOR PROVIDING APPLICATION PROGRAMMING INTERFACES AND	
		APPLICATION PROGRAMMING INTERFACE EXTENSIONS TO THIRD PARTY APPLICATIONS FOR	
455/181/2 PCT/CON	14/474,248	OPTIMIZING AND MINIMIZING APPLICATION TRAFFIC	9/1/2014

FURTHERMORE, WHEREAS, the undersigned, Ross Bott, (hereinafter "Assignor") has invented certain new and useful improvements described in the applications identified in Table I.

AND, WHEREAS, Seven Networks, Inc., having a place of business at 959 Skyway Road, Suite 100, San Carlos, CA 94070 (hereinafter "Assignee"), has already acquired an interest in the applications identified in Table I by and through an employment or other agreement between Assignor and Assignee.

However, in the avoidance of doubt and as confirmation of the already acquired interest by Assignee, NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor has assigned and by these presents does hereby sell, assign, transfer, and convey unto the Assignee, its successors and assigns, his entire right, title, and interest in and to the invention and application, including the right to sue for past infringements and any other prior occurring rights, provided any such rights exist, and in and to any and all domestic and foreign patent applications filed on the invention, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America, and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with his right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment and sale had not been made. Assignor further assigns to Assignee the right to claim entitlement and/or priority to any applications that entitlement or priority may be claimed for this or any later filed application. The assignment of the right to claim entitlement and/or priority is executed nunc pro tunc and is considered effective as of the filing date of the earliest application to which priority and/or entitlement is claimed.

Assignor hereby requests that said Letters Patent be issued in accordance with this assignment.

## PATENT REEL: 034229 FRAME: 0462

Assignor further covenants and agrees that, at the time of the execution and delivery of these presents, Assignor possesses full title to the invention and application above-mentioned, and that he has the unencumbered right and authority to make this assignment.

Assignor further covenants and agrees, and likewise binds his heirs, legal representatives and assigns, to promptly communicate to said Assignee or its representatives any facts known to him relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the Assignee, its representatives, successors and assigns to secure patent or similar protection for the said invention in all countries and to vest in the Assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said Assignee, its successors, assigns and other legal representatives.

Executed this 6 day of 60000, 2014.

Hlor Virth

**Ross Bott** 

#### **DECLARATION AND ASSIGNMENT OF RIGHTS**

As a below named inventor (hereinafter designated as the undersigned or the Assignor, where appropriate), I hereby declare that:

The application is as identified by the attorney docket number, title, Filing Date, or Application Title as set forth in the following Table I:

The application in Table I was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application in Table I.

The undersigned hereby acknowledges that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Application	Attorney Docket		
No.	No.	Filing Date	Application Title
			WIRELESS TRAFFIC MANAGEMENT
			SYSTEM CACHE OPTIMIZATION USING
13523669	455/151/1 UTIL	6/14/2012	HTTP HEADERS
			SELECTIVE DATA COMPRESSION BY A
			DISTRIBUTED TRAFFIC MANAGEMENT
			SYSTEM TO REDUCE MOBILE DATA
13467159	455/150/1 UTIL	5/9/2012	TRAFFIC AND SIGNALING TRAFFIC
			OPERATION MODES FOR MOBILE
			TRAFFIC OPTIMIZATION AND
			CONCURRENT MANAGEMENT OF
			OPTIMIZED AND NON-OPTIMIZED
13715900	455/149/1 US	12/14/2012	TRAFFIC
			SYSTEM AND METHOD FOR
			GENERATING A REPORT TO A NETWORK
			OPERATOR BY DISTRIBUTED
13710336	455/148/2 US	12/10/2012	AGGREGATION OF DATA
			MOBILE NETWORK REPORTING AND
			USAGE ANALYTICS SYSTEM AND
			METHOD AGGREGATED USING A
			DISTRIBUTED TRAFFIC OPTIMIZATION
13710274	455/148/1 US	12/10/2012	SYSTEM
			HIERARCHIES AND CATEGORIES FOR
			MANAGEMENT AND DEPLOYMENT OF
13715801	455/147/1 US	12/14/2012	POLICIES FOR DISTRIBUTED WIRELESS

#### TABLE I

			TRAFFIC OPTIMIZATION
			RADIO-AWARENESS OF MOBILE DEVICE
			FOR SENDING SERVER-SIDE CONTROL
			SIGNALS USING A WIRELESS NETWORK
13787702	455/146/2 UTIL	3/6/2013	OPTIMIZED TRANSPORT PROTOCOL
13787702	433/140/2 0 11L	5/0/2015	RADIO-AWARENESS OF MOBILE DEVICE
			FOR SENDING SERVER-SIDE CONTROL
			SIGNALS USING A WIRELESS NETWORK
13708758	455/146/1 US	12/7/2012	OPTIMIZED TRANSPORT PROTOCOL
15700750	+55/140/105	12/1/2012	A MOBILE DEVICE AND METHOD TO
			UTILIZE THE FAILOVER MECHANISMS
			FOR FAULT TOLERANCE PROVIDED FOR
			MOBILE TRAFFIC MANAGEMENT AND
			NETWORK/DEVICE RESOURCE
13706860	455/145/2	12/6/2012	CONSERVATION
13700800	455/145/2	12/0/2012	SYSTEM OF REDUNDANTLY CLUSTERED
			MACHINES TO PROVIDE FAILOVER
			MACHINES TO FROVIDE FAILOVER MECHANISMS FOR MOBILE TRAFFIC
			MANAGEMENT AND NETWORK
13706770	455/145/1 UTIL	12/6/2012	RESOURCE CONSERVATION
15700770	+55/145/1011L	12/0/2012	MOBILE DEVICE HAVING CONTENT
			CACHING MECHANISMS INTEGRATED
			WITH A NETWORK OPERATOR FOR
			TRAFFIC ALLEVIATION IN A WIRELESS
13708875	455/144/2 UTIL	12/7/2012	NETWORK AND METHODS THEREFOR
15700075	433/144/2 0 11E	12/1/2012	FLEXIBLE AND DYNAMIC INTEGRATION
			SCHEMAS OF A TRAFFIC MANAGEMENT
			SYSTEM WITH VARIOUS NETWORK
			OPERATORS FOR NETWORK TRAFFIC
13708859	455/144/1 UTIL	12/7/2012	ALLEVIATION
13700037		12/1/2012	OPTIMIZATION OF MOBILE TRAFFIC
			DIRECTED TO PRIVATE NETWORKS AND
13597031	455/143/2 UTIL	8/28/2012	OPERATOR CONFIGURABILITY THEREOF
15577051	133/113/2 011	0,20,2012	CELLULAR OR WIFI MOBILE TRAFFIC
			OPTIMIZATION BASED ON PUBLIC OR
13596963	455/143/1 UTIL	8/28/2012	PRIVATE NETWORK DESTINATION
15570705		0/20/2012	ENHANCED CUSTOMER SERVICE FOR
			MOBILE CARRIERS USING REAL-TIME
			AND HISTORICAL MOBILE APPLICATION
			AND TRAFFIC OR OPTIMIZATION DATA
			AND TRAFFIC OR OF THREE TION DATA ASSOCIATED WITH MOBILE DEVICES IN
13860403	455/142/2 UTIL	4/10/2013	A MOBILE NETWORK
12000102	100/112/2 0111	1,10,2013	INTELLIGENT CUSTOMER
			SERVICE/CALL CENTER SERVICES
			ENHANCED USING REAL-TIME AND
			HISTORICAL MOBILE APPLICATION AND
			TRAFFIC-RELATED STATISTICS
			COLLECTED BY A DISTRIBUTED
			CACHING SYSTEM IN A MOBILE
13860332	455/142/1 UTIL	4/10/2013	NETWORK
13000352	1-5-5/1 <b>-</b> 2/1 U11L	1/10/2013	

		1	
			STRATEGICALLY TIMED DELIVERY OF
			ADVERTISEMENTS OR ELECTRONIC
12572500		0/10/2012	COUPONS TO A MOBILE DEVICE IN A
13572598	455/141/2 UTIL	8/10/2012	MOBILE NETWORK
			INTELLIGENT PLACEMENT AND
			DELIVERY OF MOBILE
			ADVERTISEMENTS AND ELECTRONIC
			COUPONS VIA A DISTRIBUTED SYSTEM
13572582	455/141/1 UTIL	8/10/2012	IN A MOBILE NETWORK
			MOBILE DEVICE USAGE CONTROL IN A
			MOBILE NETWORK BY A DISTRIBUTED
13560092	455/140/1 UTIL	7/27/2012	PROXY SYSTEM
			PARENTAL CONTROL OF MOBILE
13560002	455/140/1 UTIL	7/27/2012	CONTENT ON A MOBILE DEVICE
			APPLICATION AND NETWORK-BASED
			LONG POLL REQUEST DETECTION AND
13651247	455/139/3 UTIL	10/12/2012	CACHEABILITY ASSESSMENT THEREFOR
			APPLICATION AND NETWORK-BASED
			LONG POLL REQUEST DETECTION AND
13412338	455/139/2 UTIL	3/5/2012	CACHEABILITY ASSESSMENT THEREFOR
			APPLICATION AND NETWORK-BASED
			LONG POLL REQUEST DETECTION AND
13274248	455/139/1 UTIL	10/14/2011	CACHEABILITY ASSESSMENT THEREFOR
			CACHING IN A WIRELESS NETWORK OF
			CONTENT DELIVERED FOR A MOBILE
			APPLICATION REQUESTED OVER A
13915538	455/138/2 UTIL	6/11/2013	LONG-POLL REQUEST
			DISTRIBUTED CACHING IN A WIRELESS
			NETWORK OF CONTENT DELIVERED
			FOR A MOBILE APPLICATION OVER A
13274250	455/138/1 UTIL	10/14/2011	LONG-HELD REQUEST
			MONITORING MOBILE APPLICATION
			ACTIVITIES FOR MALICIOUS TRAFFIC
13546995	455/137/1 UTIL	7/11/2012	ON A MOBILE DEVICE
			AUTOMATIC GENERATION AND
			DISTRIBUTION OF POLICY
			INFORMATION REGARDING MALICIOUS
			MOBILE TRAFFIC IN A WIRELESS
13547001	455/137/2 UTIL	7/11/2012	NETWORK
			MANAGING CACHE TO PREVENT
			OVERLOADING OF A WIRELESS
13912067	455/136/2 UTIL	6/6/2013	NETWORK DUE TO USER ACTIVITY
			DETECTION AND MANAGEMENT OF
			USER INTERACTIONS WITH
			FOREGROUND APPLICATIONS ON A
			MOBILE DEVICE IN DISTRIBUTED
13735868	455/136/1 UTIL	1/7/2013	CACHING
			FACILITATION OF MOBILE OPERATOR
			BILLING BASED ON WIRELESS
13900492	455/135/2 UTIL	5/22/2013	NETWORK TRAFFIC MANAGEMENT AND

[		Г	TRACKING OF DESTRIATION ADDRESS
			TRACKING OF DESTINATION ADDRESS
			IN CONJUNCTION WITH BILLING
			POLICIES
			WIRELESS NETWORK TRAFFIC ROUTING
			THROUGH TRAFFIC OPTIMIZATION AND
			TRACKING OF DESTINATION ADDRESS
			TO FACILITATE SERVICE PROVIDER
13900516	455/135/1 UTIL	5/22/2013	BILLING
			REQUEST AND RESPONSE
			CHARACTERISTICS BASED ADAPTATION
			OF DISTRIBUTED CACHING IN A MOBILE
13274501	455/135/1 UTIL	10/17/2011	NETWORK
10271001	100/100/1011	10/1//2011	CACHING ADAPTED FOR MOBILE
			APPLICATION BEHAVIOR AND
13274265	455/134/1 UTIL	10/14/2011	NETWORK CONDITIONS
13274203	433/134/1011L	10/14/2011	DYNAMIC BANDWIDTH ADJUSTMENT
			FOR BROWSING OR STREAMING
			ACTIVITY IN A WIRELESS NETWORK
			BASED ON PREDICTION OF USER
			BEHAVIOR WHEN INTERACTING WITH
13776493	455/132/1 UTIL	2/25/2013	MOBILE APPLICATIONS
			DETECTION AND FILTERING OF
			MALWARE BASED ON TRAFFIC
			OBSERVATIONS MADE IN A
			DISTRIBUTED MOBILE TRAFFIC
13458844	455/129/1 UTIL	4/27/2012	MANAGEMENT SYSTEM
			DYNAMIC CATEGORIZATION OF
			APPLICATIONS FOR NETWORK ACCESS
13758906	455/128/1 UTIL	2/4/2013	IN A MOBILE NETWORK
			MOBILE DEVICE AND METHOD FOR
			PRESERVING SESSION STATE
			INFORMATION WITHOUT A NEED FOR
			TRANSMISSION OF MESSAGES IN A
13856691	455/126/2 UTIL	4/4/2013	WIRELESS NETWORK
15050071	455/120/2 0111		METHOD AND SYSTEM FOR
			MANAGEMENT OF A VIRTUAL
			NETWORK CONNECTION WITHOUT
13856366	455/126/1 UTIL	4/3/2013	
13830300	433/120/1 U 11L	4/3/2013	HEARTBEAT MESSAGES
			USER AS AN END POINT FOR PROFILING
12750040	455/104/1 11711	2/4/2012	AND OPTIMIZING THE DELIVERY OF
13758842	455/124/1 UTIL	2/4/2013	CONTENT IN A WIRELESS NETWORK
			CACHE STATE MANAGEMENT ON A
			MOBILE DEVICE TO PRESERVE USER
13592233	455/121/2 UTIL	8/22/2012	EXPERIENCE
			SYSTEM AND METHOD FOR MAKING
			REQUESTS ON BEHALF OF A MOBILE
			DEVICE BASED ON ATOMIC PROCESSES
13/457,368	455/120/2 UTIL	4/26/2012	FOR MOBILE TRAFFIC RELIEF
			DETECTING AND PRESERVING STATE
13458797	455/121/1 UTIL	4/27/2012	FOR SATISFYING APPLICATION

			REQUESTS IN A DISTRIBUTED PROXY
			AND CACHE SYSTEM
			MOBILE DEVICE WHICH OFFLOADS
			REQUESTS MADE BY A MOBILE
			APPLICATION TO A REMOTE ENTITY
			FOR CONSERVATION OF MOBILE
			DEVICE AND NETWORK RESOURCES
13457335	455/120/1 UTIL	4/26/2012	AND METHODS THEREFOR
15457555	433/120/1 U 11L	4/20/2012	
13451361	455/119/1 UTIL	4/19/2012	DEVICE RESOURCES SHARING FOR NETWORK RESOURCE CONSERVATION
15451501	455/119/1 U 11L	4/19/2012	SYSTEM AND METHOD FOR A MOBILE
12740795	455/110/2 LITH	1/14/2012	DEVICE TO USE PHYSICAL STORAGE OF
13740785	455/118/3 UTIL	1/14/2013	ANOTHER DEVICE FOR CACHING
			SYSTEM AND METHOD FOR A MOBILE
12554950	455/110/0 LITH	7/20/2012	DEVICE TO USE PHYSICAL STORAGE OF
13554859	455/118/2 UTIL	7/20/2012	ANOTHER DEVICE FOR CACHING
			SOCIAL CACHING FOR DEVICE
12451240		4/10/2012	RESOURCE SHARING AND
13451340	455/118/1 UTIL	4/19/2012	MANAGEMENT
			WIRELESS SHARING OF DEVICE
			RESOURCES ALLOWING DEVICE
12605475		0/6/2012	STORAGE NEEDS TO BE WIRELESSLY
13605475	455/117/2 UTIL	9/6/2012	OFFLOADED TO OTHER DEVICES
			SHARED RESOURCE AND VIRTUAL
10451005		1/10/2012	RESOURCE MANAGEMENT IN A
13451327	455/117/1 UTIL	4/19/2012	NETWORKED ENVIRONMENT
			AUTOMATIC PROVISIONING OF INSTANT
10070145		2/12/2012	MESSAGING AND SOCIAL NETWORKING
13372145	455/116/1 UTIL	2/13/2012	SERVICES
			SINGLE ACTION ACCESS TO CONTEXT
		1/2 7/2 0 1 2	SPECIFIC CONTENT AT A MOBILE
13360470	455/115/1 UTIL	1/27/2012	DEVICE
			UNIFIED ACCESS AND MANAGEMENT OF
			EVENTS ACROSS MULTIPLE
10010015		1/10/2010	APPLICATIONS AND ASSOCIATED
13349345	455/114/1 UTIL	1/12/2012	CONTACTS THEREOF
			SYSTEM AND METHOD FOR REDUCTION
			OF MOBILE NETWORK TRAFFIC USED
10046607	455/110/1100	1/0/2012	FOR DOMAIN NAME SYSTEM (DNS)
13346627	455/113/1 UTIL	1/9/2012	QUERIES
			OPTIMIZATION OF RESOURCE POLLING
10001064		11/20/2011	INTERVALS TO SATISFY MOBILE DEVICE
13301864	455/112/1 UTIL	11/22/2011	REQUESTS
			MOBILE NETWORK BACKGROUND
		0/11/2015	TRAFFIC DATA MANAGEMENT WITH
13618371	455/111/3 UTIL	9/14/2012	OPTIMIZED POLLING INTERVALS
			MOBILE NETWORK BACKGROUND
			TRAFFIC DATA MANAGEMENT WITH
13407582	455/111/2 UTIL	2/28/2012	OPTIMIZED POLLING INTERVALS
13300267	455/111/1 UTIL	11/18/2011	ALIGNING DATA TRANSFER TO

			OPTIMIZE CONNECTIONS ESTABLISHED
			FOR TRANSMISSION OVER A WIRELESS
			NETWORK
			MOBILE TRAFFIC CATEGORIZATION
			AND POLICY FOR NETWORK USE
			OPTIMIZATION WHILE PRESERVING
13287058	455/110/1 UTIL	11/1/2011	USER EXPERIENCE
			TIMING OF KEEP-ALIVE MESSAGES
			USED IN A SYSTEM FOR MOBILE
			NETWORK RESOURCE CONSERVATION
13604404	455/109/2 UTIL	9/5/2012	AND OPTIMIZATION
			CACHE DEFEAT DETECTION AND
			CACHING OF CONTENT ADDRESSED BY
			IDENTIFIERSINTENDED TO DEFEAT
13474561	455/108/4 UTIL	5/17/2012	CACHE
			DISTRIBUTED SYSTEM FOR CACHE
			DEFEAT DETECTION AND CACHING OF
1			CONTENT ADDRESSED BY IDENTIFIERS
13287085	455/108/3 UTIL	11/1/2011	INTENDED TO DEFEAT CACHE
			CACHE DEFEAT DETECTION AND
			CACHING OF CONTENT ADDRESSED BY
10007070		11/1/2011	IDENTIFIERS INTENDED TO DEFEAT
13287072	455/108/2 UTIL	11/1/2011	CACHE
			DISTRIBUTED CACHING FOR RESOURCE
1017/07		7/5/2011	AND MOBILE NETWORK TRAFFIC
13176537	455/107/1 UTIL	7/5/2011	MANAGEMENT
12170/75	455/10C LITH	7/0/2011	DISTRIBUTED IMPLEMENTATION OF
13178675	455/106 UTIL	7/8/2011	DYNAMIC WIRELESS TRAFFIC POLICY
			PREDICTION OF ACTIVITY SESSION FOR
13115740	455/105/1 US	5/25/2011	MOBILE NETWORK USE OPTIMIZATION AND USER EXPERIENCE ENHANCEMENT
13113740	455/105/105	5/25/2011	
			MOBILE NETWORK TRAFFIC
13355443	455/104/2 US	1/20/2012	COORDINATION ACROSS MULTIPLE APPLICATIONS
15555445	433/104/2 03	1/20/2012	MOBILE NETWORK TRAFFIC
			COORDINATION ACROSS MULTIPLE
13115631	455/104/1 US	5/25/2011	APPLICATIONS
15115051	433/104/103	5/25/2011	MOBILE APPLICATION TRAFFIC
13351176	455/103/2 US	1/16/2012	OPTIMIZATION
15551170	433/103/2 03	1/10/2012	MOBILE APPLICATION TRAFFIC
13188553	455/103/01	7/22/2011	OPTIMIZATION
13100333		//22/2011	MOBILE DEVICE RADIO USE
			OPTIMIZATION BY BATCHING LOW
13477625	455/102/3 US	5/22/2012	PRIORITY REQUESTS
13777023	133/102/3 00	512212012	DISTRIBUTED MANAGEMENT OF KEEP-
			ALIVE MESSAGE SIGNALING FOR
			MOBILE NETWORK RESOURCE
13287046	455/102/2 UTIL	11/1/2011	CONSERVATION AND OPTIMIZATION
15207040		11/1/2011	SYSTEM AND METHOD FOR
13407406	455/102/2 US	2/28/2012	CONSERVING BATTERY CONSUMPTION
1010100	133/102/2 00		

			ON A MOBILE DEVICE
			CONTEXT AWARE TRAFFIC
			MANAGEMENT FOR RESOURCE
			CONSERVATION IN A WIRELESS
13178598	455/102/1 UTIL	7/8/2011	NETWORK
			3D MOBILE USER INTERFACE WITH
			CONFIGURABLE WORKSPACE
13075887	455/101/1 UTIL	3/30/2011	MANAGEMENT
62022614	455/190	7/9/2014	SECURE HANDLING OF SSL TRAFFIC

FURTHERMORE, WHEREAS, the undersigned, Michael Luna, (hereinafter "Assignor") has invented certain new and useful improvements described in the applications identified in Table I.

AND, WHEREAS, Seven Networks, Inc., having a place of business at 959 Skyway Road, Suite 100, San Carlos, CA 94070 (hereinafter "Assignee"), has already acquired an interest in the applications identified in Table I by and through an employment or other agreement between Assignor and Assignee.

However, in the avoidance of doubt and as confirmation of the already acquired interest by Assignee, NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor has assigned and by these presents does hereby sell, assign, transfer, and convey unto the Assignee, its successors and assigns, his entire right, title, and interest in and to the invention and application, including the right to sue for past infringements and any other prior occurring rights, provided any such rights exist, and in and to any and all domestic and foreign patent applications filed on the invention, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America, and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with his right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment and sale had not been made. Assignor further assigns to Assignee the right to claim entitlement and/or priority to any applications that entitlement or priority may be claimed for this or any later filed application. The assignment of the right to claim entitlement and/or priority is executed nunc pro tunc and is considered effective as of the filing date of the earliest application to which priority and/or entitlement is claimed.

Assignor hereby requests that said Letters Patent be issued in accordance with this assignment.

### PATENT REEL: 034229 FRAME: 0470

Assignor further covenants and agrees that, at the time of the execution and delivery of these presents, Assignor possesses full title to the invention and application above-mentioned, and that he has the unencumbered right and authority to make this assignment.

Assignor further covenants and agrees, and likewise binds his heirs, legal representatives and assigns, to promptly communicate to said Assignee or its representatives any facts known to him relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the Assignee, its representatives, successors and assigns to secure patent or similar protection for the said invention in all countries and to vest in the Assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said Assignee, its successors, assigns and other legal representatives.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

FROL\_\_\_

**Michael Luna**