

Search history

Search 1: IC=H04W16/00 (Results 7357)
Search 2: IC=H04W16/14 (Results 7748)
Search 3: IC=H04W7200 (Results 0)
Search 4: IC=H04W72/00 (Results 15486)
Search 5: 1 or 2 or 4 (Results 27399)
Search 6: 5 and spectral (Results 3100)
Search 7: 6 and opportunities (Results 335)
Search 8: 7 and occupancy (Results 71)
Search 9: 8 and cellular (Results 58)
Search 10: 9 and propagation (Results 27)
Search 11: 10 and identifies (Results 12)

Title: PCS POCKET PHONE/MICROCELL COMMUNICATION OVER-AIR PROTOCOL

Abstract: A simple and flexible over-air protocol for use with a mobile telephone system, having hand-held telephones (102) in a microcell or other type of **cellular** communication system. A method in which user stations (102) communicate with one or more base stations (104) to place and receive telephone calls, in which the user stations (102) are provided a secure voice or data link and have the ability to handoff calls between base stations (104) while such calls are in progress. Each base station (104) has a set of "air channels" to which it transmits in sequence. The air channels supported by each base station (104) are called that base station's polling loop. A user station (102) receives general polling information on an unoccupied air channel, transmits responsive information to the base station, and awaits acknowledgement from the base station. Each base station (104) may therefore simultaneously maintain communication with as many user stations (102) as there are air channels in its polling loop. The ability of a user station (102) to communicate on any unoccupied air channel makes the protocol air-channel agile, while the stability of user station and base station clocks may define air channels, gaps, and minor frames.

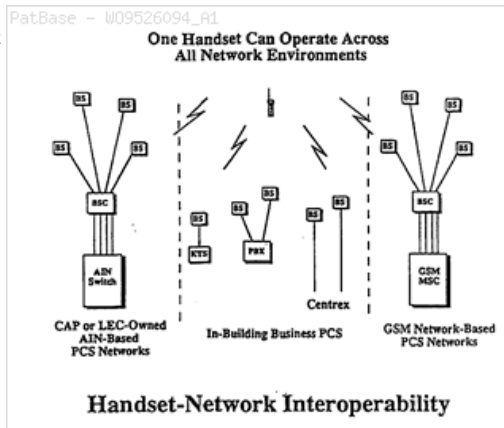
Classifications:

International (IPC 8-9): G10L19/00 H04B1/69 H04B7/005 H04B7/212 H04B7/26 H04J13/00 H04J3/00 H04J3/17 H04L1/00 H04L1/20 H04L12/56 H04M11/00 H04Q7/22 H04Q7/38 H04W16/10 H04W36/08 H04W52/04 H04W52/08 H04W52/36 H04W52/40 H04W72/02 H04W72/12 H04W74/06 H04W84/02 (Advanced/Invention); H04B7/08 H04B7/10 H04B7/26 H04M11/00 H04Q7/30 H04Q7/32 H04Q7/36 H04W36/00 H04W36/18 H04W36/36 H04W52/00 H04W52/24 H04W56/00 H04W72/04 H04W84/02 H04W92/12 (Advanced/Non-invention); H04W72/00 (Core/Invention); H04W84/02 (Core/Non-invention)

International (IPC 1-7): H04B1/69 H04B7/204 H04B7/212 H04B7/26 H04M11/00 H04Q7/20 H04Q7/22 H04Q7/38

CPC: H04W74/06 G10L19/012 H04B7/0805 H04B7/10 H04B7/2618 H04B7/2643 H04B7/2668 H04L1/0002 H04L1/0025 H04L1/20 H04L47/14 H04L47/522 H04L47/6215 H04L49/90 H04L49/901 H04W24/10 H04W36/0055 H04W36/18 H04W36/30 H04W36/36 H04W52/04 H04W52/08 H04W52/24 H04W52/36 H04W52/362 H04W52/367 H04W52/40 H04W56/00 H04W72/044 H04W72/0446 H04W72/1278 H04W92/12 H04W52/38 H04L47/50 H04W76/10

European: G10L19/00N G10L19/012 H04B7/26E H04B7/26T H04L1/00A1 H04L1/00A9A H04L1/20 H04L12/56D4 H04L12/56K H04L47/14 H04L47/52B H04L47/62C H04L49/90 H04L49/90C H04Q7/22S3P H04Q7/36D H04Q7/38 H04Q7/38H H04W36/00P6 H04W52/04 H04W52/08 H04W52/36 H04W52/40 H04W72/12F H04W74/06 T04B7/08B2 T04B7/10 T04B7/26V4 T04L1/00A9A T04Q7/22S3P T04Q7/30N T04Q7/32E2 T04Q7/36M T04Q7/38C2 T04Q7/38H T04Q7/38P T04Q7/38R T04W24/10 T04W36/18 T04W36/30 T04W36/36 T04W52/00 T04W52/24 T04W52/36A T04W52/36K T04W56/00 T04W72/04H T04W72/04H2 T04W74/06 T04W76/02 T04W92/12

**Family:**

Publication number	Publication date	Application number	Application date
AT308852 E	20051115	AT19950914135T	19950320
AT399433 E	20080715	AT19950014443T	19950320
AT442756 E	20090915	AT19950014441T	19950320
CA2186031 AA	19950928	CA19952186031	19950320
DE69534566 D1	20051208	DE19956034566	19950320
DE69534566 T2	20060720	DE19956034566T	19950320
DE69535780 D1	20080807	DE19956035780	19950320
DE69536002 D1	20091022	DE19956036002	19950320
EP0763300 A1	19970319	EP19950914135	19950320
EP0763300 A4	19991208	EP19950914135	19950320
EP0763300 B1	20051102	EP19950914135	19950320
HK1012477 A1	20060609	HK19980113358	19981215
IL113059 A0	19950629	IL19950113059	19950321
IL113059 A1	19990126	IL19950113059	19950321
JP09510844 T2	19971028	JP19950524766T	19950320
JP3404045 B2	20030506	JP19950524766T	19950320
JP9510844 T2	19971028	JP19950524766T	19950320
KR19970702648 A	19970513	KR19960705400	19960921
KR19977002648 A	19970513	KR19967005400	19950320
WO9526094 A1	19950928	WO1995US03500	19950320

Priority:

US19940215306 19940321 US19940284053 19940801 WO1995US03500 19950320

Probable Assignee: XIRCOM WIRELESS INC

Assignee(s): (std): OMNIPOINT CORP ; XIRCOM WIRELESS INC

Assignee(s): PETERSON PETER O ; PETCH BRYAN K ; OMNIPOINT TECHNOLOGIES INC ; ANDERSON GARY B ; JENSEN RYAN N

Inventor(s): (std): PETERSON PETER O ; PETERSON O ; PETCH K ; PETCH BRYAN K ; JENSEN RYAN N ; JENSEN N ; ANDERSON GARY B ; ANDERSON B

Agent(s): SMART AND BIGGAR; REINHOLD COHN AND PARTNERS

Designated states: AT BE CA CH DE DK ES FR GB GR IE IT JP KR LI LU MC NL PT SE

Title: HIERARCHICAL DATA COLLECTION NETWORK SUPPORTING PACKETIZED VOICE COMMUNICATIONS AMONG WIRELESS TERMINALS AND TELEPHONES

Abstract: A packet-based, hierarchical communication system, arranged in a spanning tree configuration, is described in which wired and wireless communication networks exhibiting substantially different characteristics are employed in an overall scheme to link portable or mobile computing devices. The network accommodates real time voice transmission both through dedicated, scheduled bandwidth and through a packet-based routing within the confines and constraints of a data network. Conversion and call processing circuitry is also disclosed which enables access devices and personal computers to adapt voice information between analog voice stream and digital voice packet formats as proves necessary. Routing pathways include wireless spanning tree networks, wide area networks, telephone switching networks, internet, etc., in a manner virtually transparent to the user. A voice session and associate call setup simulates that of conventional telephone switching network, providing well-understood functionality common to any mobile, remote or stationary terminal, phone, computer, etc.

Classifications:

International (IPC 8-9): B60R16/02 B60R16/023 G06F1/16 G06F1/28 G06F1/32 G06F11/14 G06F15/02 G06F9/445 G06K17/00 G06K7/10 G06K7/12 G07C5/08 G07F7/02 G07G1/00 H01Q1/22 H04B1/38 H04B7/005 H04L1/00 H04L1/16 H04L12/28 H04L12/56 H04L27/12 H04L27/156 H04L29/06 H04W52/46 H04W88/02 H04W88/06 H04W92/18 (Advanced/Invention); B60R16/03 H04B1/16 H04L29/08 H04M1/73 H04M7/00 H04W28/14 H04W4/18 H04W40/02 H04W72/12 H04W76/02 H04W92/02 (Advanced/Non-invention); B60R16/02 B60R16/023 G06F1/16 G06F1/28 G06F1/32 G06F11/14 G06F15/02 G06F9/445 G06K17/00 G06K7/10 G06K7/12 G07C5/00 G07F7/00 G07G1/00 H01Q1/22 H04B1/38 H04B7/005 H04L1/00 H04L1/16 H04L12/28 H04L12/56 H04L27/10 H04L27/156 H04L29/06 H04W52/00 H04W88/00 H04W92/00 (Core/Invention); B60R16/03 H04B1/16 H04L29/08 H04M1/72 H04M7/00 H04W28/02 H04W4/18 H04W40/02 H04W72/00 H04W76/00 (Core/Non-invention)

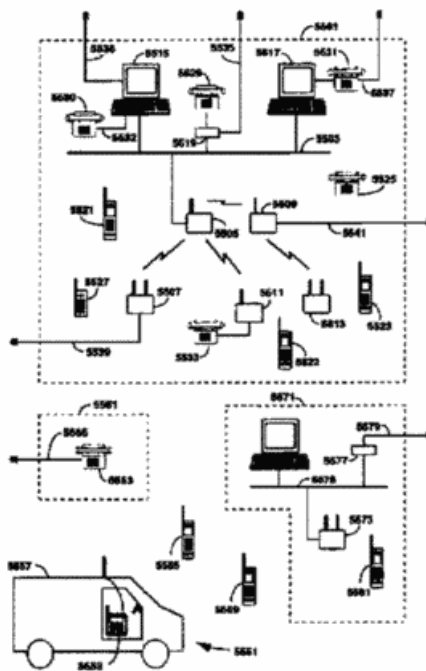
International (IPC 1-7): H04J3/26 H04Q7/20

CPC: H04L69/18 H04L69/32 G07F7/02 B60R16/0231 B60R16/0315 G06F1/1626 G06F1/163 G06F1/1632 G06F1/28 G06F1/3203 G06F15/0225 G06F2200/1632 G06F2200/1633 G06K7/10574 G06K7/10584 G06K7/10702 G06K7/10722 G06K7/10732 G06K7/10811 G06K7/10841 G06K7/10851 G06K7/10881 G06K7/1098 G06K7/12 G06K17/0022 G06K2017/0051 G06Q20/343 G07C5/0808 G07C5/0858 G07G1/0045 H04B1/1615 H04B1/3877 H04B2001/3894 H04L1/0002 H04L1/0003 H04L1/0025 H04L1/0032 H04L1/1671 H04L1/1685 H04L27/12 H04L27/156 H04L29/06 H04M7/006 H04W28/14 H04W40/02 H04W52/46 H04W88/06 H04W92/02 H04W92/18 H04W76/10

European: B60R16/023D B60R16/02B6 G06F1/16P3 G06F1/16P5 G06F1/16P6 G06F1/28 G06F1/32P G06F15/02D G06K17/00G G06K7/10S2B2 G06K7/10S2B4 G06K7/10S2P4D G06K7/10S4D G06K7/10S4D2 G06K7/10S8B2 G06K7/10S9C G06K7/10S9D G06K7/10S9F G06K7/10S9V G06K7/12 G06Q20/343 G07C5/08D G07C5/08R2B G07F7/02 G07G1/00C2 H01Q1/22 H04B1/38P6 H04L1/00A1 H04L1/00A1M H04L1/00A9A H04L1/00A9N H04L1/16F15 H04L1/16F17 H04L27/12 H04L27/156 H04L29/06 H04W292/18 H04W52/46 H04W54/062 L60R16/03M S06F200/1632 S06F200/1633 S06K17/00W10 T04B1/16A2 T04B1/38W T04L29/06K T04L29/08A T04M7/00M T04W12/067 T04W2/10 T04W204/18 T04W22/02 T04W228/14 T04W23/06 T04W240/02 T04W272/12 T04W276/02 T04W28/14 T04W292/02 T04W36/06 T04W40/02 T04W54/02 T04W76/02 T04W88/06 T04W92/02 T04W92/18

US: 370/338 370/346 370/349 379/59 455/54.1 714/E11.14

PatBase - US5726984_A



Title: CIRCUIT AND METHOD FOR MEASURING JITTER OF HIGH SPEED SIGNALS

Abstract: A method and circuit for measuring a statistical value of jitter for a data signal having a data rate f_D , comprises digitally sampling the data signal at a sampling rate, f_S , to produce sampled logic values, where f_D/f_S is a predetermined non-integer ratio; and analyzing the sampled values to deduce a statistical value of the jitter.

Classifications:

International (ipc 8-9): G01R29/00 G06F1/04 G06F15/80 G06M1/10 G08C15/00 H04B1/76 H04B7/005 H04B7/04 H04B7/212 H04B7/26 H04H1/00 H04J3/00 H04J3/02 H04J3/06 H04J3/16 H04J3/22 H04J3/24 H04L1/00 H04L1/16 H04L1/20 H04L12/00 H04L12/06 H04L12/18 H04L12/26 H04L12/28 H04L12/403 H04L12/413 H04L12/42 H04L12/56 H04L12/66 H04L12/741 H04L25/03 H04L29/00 H04L29/02 H04L29/06 H04L29/08 H04L36/00 H04L5/00 H04Q1/20 H04W16/28 H04W24/00 H04W28/00 H04W28/04 H04W28/06 H04W28/18 H04W28/26 H04W4/00 H04W4/18 H04W40/00 H04W48/18 H04W52/38 H04W72/04 H04W72/12 H04W74/00 H04W74/02 H04W74/04 H04W74/06 H04W74/08 H04W80/02 H04W84/08 H04W84/12 H04W84/18 (Advanced/Invention); H04J3/00 H04L1/06 H04L12/28 H04L12/56 H04L12/66 H04L27/26 H04L29/06 H04L29/08 H04L5/00 H04W28/04 H04W28/26 H04W48/08 H04W72/04 H04W72/12 (Advanced/Non-invention);

G01R29/00 G06F1/04 G06M1/00 H04B7/005 H04B7/26 H04J3/00 H04J3/02 H04L1/20 H04L12/06 H04L12/28 H04L12/407 H04L12/56 H04L12/66 H04L25/03 H04L29/00 H04L29/02 H04L29/06 H04L29/08 H04Q1/18 H04W16/00 H04W28/00 H04W28/02 H04W4/00 H04W4/18 H04W52/00 H04W72/00 H04W74/00 H04W80/00 H04W84/02 (Core/Invention); H04L29/08 H04W72/00 (Core/Non-invention); H04L H04M H04W (Subclass/Invention)

International (ipc 1-7): G06F15/80 H01L29/792 H04H1/00 H04J3/00 H04J3/06 H04L12/00 H04L12/06 H04L12/28 H04L12/403 H04L12/42 H04L12/56 H04L12/66 H04L29/06 H04L29/08 H04L36/00 H04L36/00 H04L5/14 H04Q1/20

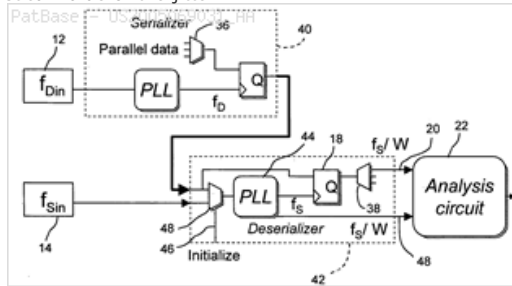
CPC: G01R29/26 G01R31/31709 H04L1/205 H04L47/15 H04L69/32 H04L69/325 H04L69/16 H04L69/161 H04L69/22 H04L29/06068 H04L1/1635 H04L25/03343 H04L47/2441 H04W80/02 H04W72/1273 H04W28/065 H04L1/0025 H04L1/0073 H04L1/0078 H04L1/0618 H04L1/1621 H04L1/1671 H04L12/403 H04L12/4633 H04W28/04 H04W28/06 H04W28/06 H04W74/06 H04W74/0808 H04W74/00 H04W74/0816 H04L5/0023 H04L5/0048 H04L5/0091 H04L27/2605 H04L69/08 H04L69/24 H04L69/324 H04W52/383 H04W72/0406 H04W72/12 H04W84/12 H04L47/70 H04L12/66 H04L29/06

European: G01R29/26 G01R31/31711 H04L1/00A9A H04L1/16F3 H04L1/20J H04L12/403 H04L12/46E H04L12/56R H04L12/66 H04L25/03B9 H04L29/06 H04L29/06E H04L29/06J3 H04L29/08A H04L29/08A2 H04L29/08A3 H04L47/15 H04L47/24D H04L5/00C5 H04L5/00E H04Q7/22S3P H04W272/00 H04W28/06D H04W36/02 H04W52/38P H04W72/12D4 H04W74/06 H04W99/00 T04L1/00B8F T04L1/00F T04L1/06T T04L1/16F15 T04L1/16F7 T04L27/26M1G T04L29/06J T04L29/06N T04L29/06P T04L29/08A T04L5/00A3C T04W12/02H T04W228/06 T04W272/04 T04W272/12 T04W28/04 T04W28/06 T04W28/06D T04W280/00 T04W284/12 T04W36/04 T04W36/06 T04W38/00 T04W48/08 T04W50/065 T04W72/04F T04W72/12 T04W74/06 T04W80/00 T04W80/02 T04W84/12

US: 1/1 324/76.11 324/76.48 370/230 370/278 370/280 370/294 370/294P 370/319 370/319P 370/321 370/328 370/328P 370/329 370/337 370/337S 370/338 370/338P 370/348 370/349 370/389 370/437 370/437P 370/447 370/447P 370/449 370/449S 370/450 370/461 370/462 370/462S 370/465 370/466 370/467 370/469 370/469P 370/474 370/476 370/503 370/503S 375/224 375/225 375/226 702/179 702/69 702/75 702/79 713/501

Family:

Publication number	Publication date	Application number	Application date
AT460796 E	20100315	AT20040795249T	20041015
AT520231 E	20110815	AT20040176962T	20041015
AT549832 E	20120315	AT20040795250T	20041015
AU2004306899 AA	20050428	AU20040306899	20041015
AU2004306899 BB	20080911	AU20040306899	20041015
AU2004306899 CA	20090212	AU20040306899	20041015
AU2004306916 AA	20050428	AU20040306916	20041015
AU2004306916 BB	20090409	AU20040306916	20041015
AU2004306916 CA	20091001	AU20040306916	20041015
BRPI0415422 A	20061205	BR2004PI15422	20041015
BRPI0415426 A	20061205	BR2004PI15426	20041015
CA2542380 AA	20060411	CA20042542380	20041015
CA2542380 C	20130521	CA20042542380	20041015
CA2542382 AA	20060411	CA20042542382	20041015
CA2542382 C	20110329	CA20042542382	20041015
CA2542384 AA	20060411	CA20042542384	20041015
CA2542384 C	20141125	CA20042542384	20041015
CA2542643 AA	20060413	CA20042542643	20041015
CA2542643 C	20130827	CA20042542643	20041015
CA2560948 AA	20060922	CA20052560948	20050324
CA2719486 AA	20050428	CA20042719486	20041015
CA2719486 C	20140218	CA20042719486	20041015
CA2753322 AA	20050428	CA20042753322	20041015
CA2753322 C	20141209	CA20042753322	20041015
CN100591037 C	20100217	CN200580016506	20050324
CN101741748 A	20100616	CN201010002064	20050324
CN101860925 A	20101013	CN201010166644	20041015
CN101860925 B	20130327	CN201010166644	20041015
CN102571801 A	20120711	CN201210014875	20041015
CN102571801 B	20150909	CN201210014875	20041015
CN102612076 A	20120725	CN201110383896	20041015
CN102612076 B	20150701	CN201110383896	20041015
CN1894888 A	20070110	CN200480037333	20041015
CN1894888 B	20120321	CN200480037333	20041015
CN1894900 A	20070110	CN200480037334	20041015
CN1894900 B	20110713	CN200480037334	20041015
CN1894909 A	20070110	CN200480037258	20041015



CN1894909 B	20120516	CN200480037258	20041015
CN1894910 A	20070110	CN200480037259	20041015
CN1894910 B	20120418	CN200480037259	20041015
CN1894914 A	20070110	CN200480037312	20041015
CN1894914 B	20100616	CN200480037312	20041015
CN1957570 A	20070502	CN200580016506	20050324
DE602004025962 D1	20100422	DE200460025962T	20041015
DE602004036930 D1	20120510	DE200460036930T	20041015
DE602004039395 D1	20121115	DE200460039395T	20041015
DE602004042136 D1	20130711	DE200460042136T	20041015
DE602004042383 D1	20130801	DE200460042383T	20041015
DE602004042423 D1	20130801	DE200460042423T	20041015
DE602004043877 D1	20140116	DE200460043877T	20041015
DK1678893 T3	20121126	DK20040795248T	20041015
DK1678898 T3	20120423	DK20040795250T	20041015
DK2267956 T3	20111024	DK20040176962T	20041015
DK2317687 T3	20130805	DK20040010614T	20041015
EP1678870 A1	20060712	EP20040795423	20041015
EP1678870 B1	20130612	EP20040795423	20041015
EP1678893 A1	20060712	EP20040795248	20041015
EP1678893 B1	20120919	EP20040795248	20041015
EP1678898 A1	20060712	EP20040795250	20041015
EP1678898 B1	20120314	EP20040795250	20041015
EP1680892 A1	20060719	EP20040795421	20041015
EP1680892 B1	20130515	EP20040795421	20041015
EP1680897 A1	20060719	EP20040795249	20041015
EP1680897 B1	20100310	EP20040795249	20041015
EP1730909 A1	20061213	EP20050730784	20050324
EP2267956 A1	20101229	EP20100176962	20041015
EP2267956 B1	20110810	EP20100176962	20041015
EP2317687 A2	20110504	EP20100010614	20041015
EP2317687 A3	20110706	EP20100010614	20041015
EP2317687 B1	20130605	EP20100010614	20041015
EP2528281 A1	20121128	EP20120180420	20041015
EP2528281 B1	20131120	EP20120180420	20041015
EP2536081 A1	20121219	EP20120184078	20041015
EP2536081 B1	20131120	EP20120184078	20041015
EP2615771 A1	20130717	EP20130020003	20041015
EP2615771 B1	20170712	EP20130020003	20041015
EP2618518 A1	20130724	EP20130020004	20041015
EP2618518 B1	20141001	EP20130020004	20041015
EP2618519 A1	20130724	EP20130020005	20041015
EP2618519 B1	20140924	EP20130020005	20041015
EP2642703 A1	20130925	EP20130172780	20041015
EP2642703 B1	20141119	EP20130172780	20041015
ES2342888 T3	20100716	ES20040795249T	20041015
ES2369341 T3	20111129	ES20100176962T	20041015
ES2381791 T3	20120531	ES20040795250T	20041015
ES2393104 T3	20121218	ES20040795248T	20041015
ES2419662 T3	20130821	ES20100010614T	20041015
ES2427145 T3	20131029	ES20040795423T	20041015
ES2530993 T3	20150309	ES20130172780T	20041015
HK1096218 A1	20121221	HK20070103043	20070321
HK1096219 A1	20120518	HK20070103044	20070321
HK1096224 A1	20130308	HK20070103107	20070322
HK1099434 A1	20110218	HK20070105372	20070522
HK1099434 A3	20070810	HK20070105372	20070522
HK1102729 A1	20101029	HK20070111000	20071011
HK1102729 A3	20071207	HK20070111000	20071011
HK1149668 A1	20131206	HK20110103674	20110412
IL174944 A0	20060820	IL20060174944	20060411
IL174944 A1	20111130	IL20040174944	20041015
IL175002 A0	20060820	IL20060175002	20041015
IL175002 A1	20121031	IL20040175002	20041015
IL211222 A0	20110428	IL20110211222	20110214
IL211222 A1	20120924	IL20040211222	20041015
IL211223 A0	20110428	IL20110211223	20110214
IL211223 A1	20120924	IL20040211223	20041015
IL216378 A0	20111229	IL20110216378	20111115
IL216378 A1	20130228	IL20040216378	20041015
IN02020DN2006 A	20070803	IN2006DN02020	20060413
IN02022DN2006 A	20070622	IN2006DN02022	20060413
IN02030DN2006 A	20070622	IN2006DN02030	20060413
IN02036DN2006 A	20070622	IN2006DN02036	20060413
IN02169DN2006 A	20070420	IN2006DN02169	20060420
IN03439DN2010 A	20101022	IN2010DN03439	20100517
IN03440DN2010 A	20101022	IN2010DN03440	20100517
IN03441DN2010 A	20101022	IN2010DN03441	20100517
IN05653DN2006 A	20070713	IN2006DN05653	20060928
IN243925 B	20101112	IN2006DN02036	20060413
IN249706 B	20111111	IN2006DN02020	20060413

IN268922 B	20140424	IN2006DN02030	20060413
IN265639 B	20150306	IN2006DN02169	20060420
JP2007509530 T2	20070412	JP20060535340T	20041015
JP2007509531 T2	20070412	JP20060535341T	20041015
JP2007509532 T2	20070412	JP20060535342T	20041015
JP2007522692 T2	20070809	JP20060535388T	20041015
JP2007531410 T2	20071101	JP20070505163T	20050324
JP2009207149 A2	20090910	JP20090050958	20090304
JP2009246977 A2	20091022	JP20090098267	20090414
JP2009246978 A2	20091022	JP20090098268	20090414
JP2010178347 A2	20100812	JP20100025733	20100208
JP2010200333 A2	20100909	JP20100068739	20100324
JP2010200363 A2	20100909	JP20100106700	20100506
JP2012257274 A2	20121227	JP20120162722	20120723
JP4490432 B2	20100623	JP20060535340T	20041015
JP4787238 B2	20111005	JP20070505163T	20050324
JP4981840 B2	20120725	JP20090098268	20090414
JP5043437 B2	20121010	JP20060535341T	20041015
JP5054151 B2	20121024	JP20100106700	20100506
JP5108039 B2	20121226	JP20100025733	20100208
JP5149224 B2	20130220	JP20090050958	20090304
JP5175314 B2	20130403	JP20100068739	20100324
JP5226214 B2	20130703	JP20060535388T	20041015
JP5518952 B2	20140611	JP20120162722	20120723
KR100813455 B1	20080313	KR20067009381	20041015
KR100814305 B1	20080319	KR20067009449	20041015
KR100849623 B1	20080731	KR20067009421	20041015
KR100930136 B1	20091207	KR20067009420	20041015
KR20060086427 A	20060731	KR20067009449	20041015
KR20060090258 A	20060810	KR20067009420	20041015
KR20060090259 A	20060810	KR20067009421	20041015
KR20060096083 A	20060905	KR20067009381	20041015
PL1678898 T3	20120731	PL20040795250T	20041015
PL2267956 T3	20120131	PL20100176962T	20041015
PT1678893 T	20121121	PT20040795248T	20041015
PT1678898 T	20120524	PT20040795250T	20041015
PT2267956 T	20111121	PT20100176962T	20041015
PT2317687 T	20130829	PT20100010614T	20041015
TW200525375 A	20050801	TW20040131486	20041015
TW200527846 A	20050816	TW20040131491	20041015
TW200527868 A	20050816	TW20040131485	20041015
TW200529619 A	20050901	TW20040131490	20041015
TW200531489 A	20050916	TW20040131483	20041015
TW200536306 A	20051101	TW20040131484	20041015
TW200618543 A	20060601	TW20050109360	20050325
TWI380633 B	20121221	TW20040131484	20041015
TWI383302 B	20130121	TW20040131486	20041015
TWI384793 B	20130201	TW20040131491	20041015
TWI385993 B	20130211	TW20040131483	20041015
TWI387279 B	20130221	TW20040131485	20041015
TWI466517 B	20141221	TW20040131490	20041015
US2005069031 AA	20050331	US20040947189	20040923
US2005111537 AA	20050526	US20040991365	20041119
US2005135284 AA	20050623	US20040964321	20041013
US2005135291 AA	20050623	US20040964320	20041013
US2005135295 AA	20050623	US20040964314	20041013
US2005135318 AA	20050623	US20040964330	20041013
US2005135403 AA	20050623	US20040964332	20041013
US2005135416 AA	20050623	US20040964237	20041013
US2006227801 AA	20061012	US20050088382	20050323
US2009323646 AA	20091231	US20080112718	20080430
US2012263137 AA	20121018	US20120533725	20120626
US2012287856 AA	20121115	US20120555174	20120722
US2013070715 AA	20130321	US20120677949	20121115
US2013230038 AA	20130905	US20130860391	20130410
US2013287043 AA	20131031	US20130920887	20130618
US7158899 BB	20070102	US20040947189	20040923
US7453255 BB	20081118	US20040991365	20041119
US8233462 BB	20120731	US20040964314	20041013
US8284752 BB	20121009	US20040964332	20041013
US8315271 BB	20121120	US20050088382	20050323
US8462817 BB	20130611	US20040964320	20041013
US8472473 BB	20130625	US20040964237	20041013
US8483105 BB	20130709	US20040964321	20041013
US8582430 BB	20131112	US20080112718	20080430
US8774098 BB	20140708	US20120555174	20120722
US8842657 BB	20140923	US20040964330	20041013
US9072101 BB	20150630	US20120533725	20120626
US9137087 BB	20150915	US20130920887	20130618
VN9681 A1	20111125	VN20060000756	20041015
VN9820 A1	20111226	VN20060000755	20060515

WO05039105 A1	20050428	WO2004US34259	20041015
WO05039119 A1	20050428	WO2004US34257	20041015
WO05039127 A1	20050428	WO2004US34061	20041015
WO05039128 A1	20050428	WO2004US34062	20041015
WO05039133 A1	20050428	WO2004US34063	20041015
WO05039134 A1	20050428	WO2004US34258	20041015
WO05099195 A1	20051020	WO2005US09790	20050324

Priority:

US20030505436P	20030924	US20030505436P	20030925	US20030511750	20031015
US20030511904	20031015	US20030511750P	20031015	US20030511904P	20031015
US20030513239P	20031021	US20030523323P	20031120	US20030026356P	20031201
US20030526356P	20031201	US20030526347P	20031201	US20030532791P	20031223
US20040545963P	20040218	US20040545953P	20040220	US20040556965	20040326
US20040556965P	20040326	US20040558102P	20040401	US20040558102P	20040402
US20040576545P	20040602	US20040586841P	20040708	US20040600960P	20040811
US20040947189	20040923	US20040964314	20041013	US20040964321	20041013
US20040964330	20041013	US20040964237	20041013	US20040964332	20041013
US20040964320	20041013	CA20042542380	20041015	CA20042542643	20041015
CA20042753322	20041015	CN200480037259	20041015	EP20040795250	20041015
EP20040795248	20041015	EP20040795421	20041015	EP20040795423	20041015
JP20060535340	20041015	EP20120184078	20041015	CN200480037333	20041015
JP20060535388	20041015	JP20060535342	20041015	JP20060535341	20041015
JP20060535388T	20041015	JP20090098267	20041015	JP20060535340T	20041015
JP20060535342T	20041015	JP20060535341T	20041015	JP20060535388T	20041015
WO2004US34061	20041015	WO2004US34062	20041015	WO2004US34063	20041015
WO2004US34259	20041015	WO2004US34257	20041015	US20040991365	20041119
US20050088382	20050323	WO2005US09790	20050324	WO2004US34062	20060515
WO2004US34259	20060515	WO2004US34063	20060515	US20080112718	20080430
EP20100010614	20100924	CA20102542380	20101125	CA20112542643	20111011
US20120533725	20120626	US20120555174	20120722	US20120677949	20121115
US20130860391	20130410	US20130920887	20130618		

Probable Assignee: QUALCOMM INC

Assignee(s): (std): SUNTER STEPHEN K ; ROY AUBIN P J ; MEYLAN ARNAUD ; WALLACE MARK S ; QUALCOMM INC ; NANDA SANJIV ; KETCHUM JOHN W ; KETCHUM JOHN WENDELL ; LOGICVISION INC ; WALTON J RODNEY ; WALTON RODNEY J ; WALTON JAY R ; WALTON JAY RODNEY

Assignee(s): MENTOR GRAPHICS CORP ; ROY AUBIN PJ ; QUALCOMM INC A DELAWARE CORP ; QUALCOMM INCATTN: INTERNATIONAL IP ADMINISTRATION5775 MOREHOUSE DRIVESAN DIEGOCA92121-1714US ; QUALCOMM INC5775 MOREHOUSE DRIVESAN DIEGOCA92121-1714US ; QUALCOMM INC SAN DIEGO ; QUALCOMM INC ND GES D STAATES DELAWARE SAN DIEGO ; COMERICA BANK

Inventor(s): (std): NANDA SANJIV MEYLAN ARNAUD WAL ; RODNEY NANDA SANJIV WALTON JAY ; SANJIV KETCHUM JOHN W WALLACE ; SANJIV KETCHUM JOHN W WALTON J ; SANJIV WALTON J RODNEY NANDA ; SANJIV WALTON RODNEY J KETCHUM ; KETCHUM JOHN WENDELL ; ARNAUD MEYLAN ; WALTON RODNEY J ; WALTON JAY RODNEY ; WALTON J RODNEY ; WALLACE MARK S ; SUNTER STEPHEN K ; ROY AUBIN P J ; RODNEY WALTON J ; NANDA SANJIV ; MEYLAN ARNAUD ; KETCHUM JOHN W ; WALTON RODNEY ; WALTON JAY R ; WALLACE MARK ; SANJIV NANDA ; RODNEY WALTON JAY ; RODNEY J WALTON ; KETCHUM JOHN ; JOHN W KETCHUM ; J RODNEY WALTON

Inventor(s): NANDA SANJIV RAMONA ; ROY AUBIN PJ ; ROY AUBIN ; SUNTER STEPHEN ; WALTON J RODNEY CARLISLE ; WALTON JAY RODNEYUS ; NANDA SANJIVUS ; KETCHUM JOHN WUS ; JRODNEY WALTON ; MARK S WALLACE ; WALTON J RODNEY NANDA SANJIV ; WALTON JAY ; WALTON JAY RODNEY SAN DIEGO CA ; WALTON RODNEY J CARLISLE ; NANDA SANJIV MEYLAN ARNAUD WALTON RODNEY J ; NANDA SANJIV SAN DIEGO CA ; NANDA SANJIV WALTON JAY RODNEY ; JAY RODNEY WALTON ; JOHN WKETCHUM ; KETCHUM JOHN W HARVARD ; KETCHUM JOHN W WALLACE MARK S WALTON RODNEY J NAND ; MEYLAN ARNAUD SAN DIEGO

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; WAGNER AND GEYER PARTNERSCHAFT MBB PATENT U RECHTSANWAELTE; BARDEHLE PAGENBERG PARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; HESELBERGER JOHANNES; GEYER ULRICH F; LANE CATHAL MICHAEL; O NEILL AOIFE; CARSTENS DIRK WILHELM; WEGNER HANS; WIMMER HUBERT; CARPINTERO MARIO; FABREGA XAVIER; FORTEA JUAN JOSE; SANFORD TCOLB AND CO; LOGICVISION CANADA INC; QUALCOMM INC PATENTS DEPARTMENT; QUALCOMM INC; EUGENE E; PROUX EUGENE E; LEUNG DENNIS S K; DENNIS S K; QUALCOMM PATENT GROUP; THIEN T; JAMES H; THIEN; RUPIT; CHARLES E; JAMES HUNT; QUALCOMM IP DEPARTMENT

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: METHODS FOR USING A DETECTOR TO MONITOR AND DETECT CHANNEL **OCCUPANCY**

Abstract: Methods for using a detector to monitor and detect channel **occupancy** are disclosed. The detector resides on a station within a network using a framed format having a periodic time structure. When non-cooperative transmissions are detected by the network, the detector assesses the availability of a backup channel enabling migration of the network. The backup channel serves to allow the network to migrate transparently when the current channel becomes unavailable. The backup channel, however, could be occupied by another network that results in the migrating network interfering with the network already using the backup channel. Thus, the detector detects active transmission sources on the backup channel to determine whether the backup channel is occupied. Methods for using the detector include scheduling detection intervals asynchronously. The asynchronous detection uses offsets from a reference point within a frame.

Classifications:

International (ipc 8-9): G06F11/30 G06F17/00 G06F21/00 G10H1/34 G10H3/18 H04B1/06 H04B1/69 H04B1/719 H04B15/00 H04B17/00 H04B17/345 H04B17/391 H04B7/00 H04B7/005 H04B7/02 H04B7/022 H04J1/16 H04J3/14 H04K1/00 H04L12/26 H04L12/28 H04L27/00 H04L29/06 H04Q7/00 H04W12/00 H04W16/14 H04W24/00 H04W24/04 H04W28/04 H04W4/00 H04W4/00 H04W48/02 H04W56/00 H04W60/00 H04W72/00 H04W72/04 H04W72/08 H04W74/08 H04W8/24 (Advanced/Invention);

H04L29/06 H04W72/04 H04W72/08 (Advanced/Non-invention);

G06F17/00 G10H1/34 G10H3/00 H04B1/69 H04B17/00 H04B7/00

H04B7/005 H04J3/14 H04K1/00 H04L12/26 H04W16/00 H04W4/00

H04W60/00 H04W72/00 (Core/Invention)

International (ipc 1-7): H04Q7/00

CPC: H04W56/00 H04W72/1231 H04W72/085 H04B1/719

H04L63/205 H04W24/04 H04B7/022 H04W48/02 H04L63/20

H04W8/245 H04W72/0453 H04W88/08 H04W56/003 H04W74/0816

H04L27/0006 H04W56/002 H04W72/0446 H04W16/14 H04W72/0406

H04W72/082 H04B7/0647 H04B17/14 H04B17/318 H04B17/345

H04B17/391 H04W28/04 H04W74/085 H04W72/08

European: H04B1/719 H04B17/00B1F H04L27/00D H04W16/14

H04W8/24N T04W56/00 T04W72/04F T04W72/08 T04W72/08B

T04W72/08D T04W72/12B5B

US: 1/1 370/217 370/217P 370/221 370/225 370/241 370/252

370/252P 370/252S 370/277 370/329 370/329S 370/330 370/335

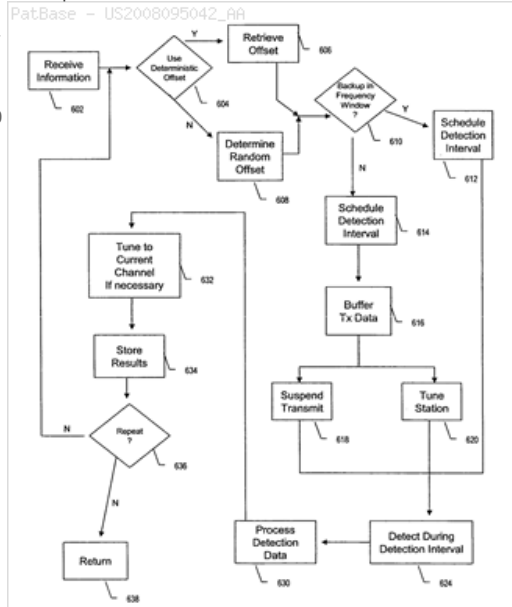
370/336 370/431 370/464 375/340 375/340S 455/1 455/226.1

455/226.100P 455/418 455/434 455/450 455/454 455/509 455/509P

455/515 455/522 455/62 455/62P 455/67.11 455/67.110P

455/67.110S 455/67.16 455/67.160S 702/189 702/66 702/70 702/73

726/1 726/1P 726/22 726/22P

**Family:**

Publication number	Publication date	Application number	Application date
EP2082586 A1	20090729	EP20070839537	20071015
EP2082586 A4	20130529	EP20070839537	20071015
EP2082586 B1	20180606	EP20070839537	20071015
EP2115918 A1	20091111	EP20070874084	20071019
EP2115918 A4	20131127	EP20070874084	20071019
EP2183856 A2	20100512	EP20080855797	20080814
EP2183934 A2	20100512	EP20080835465	20080814
EP2319260 A2	20110511	EP20090791677	20090819
US2008095042 AA	20080424	US20060582496	20061018
US2008163334 AA	20080703	US20070783563	20070410
US2009047920 AA	20090219	US20070839503	20070815
US2009268619 AA	20091029	US20070839496	20070815
US2010075704 AA	20100325	US20090543790	20090819
US2010097952 AA	20100422	US20090541624	20090814
US2010105332 AA	20100429	US20090541621	20090814
US2010173586 AA	20100708	US20090541616	20090814
US2011319031 AA	20111229	US20110228882	20110909
US2012072986 AA	20120322	US20110286745	20111101
US2013028111 AA	20130131	US20120462302	20120502
US2013072128 AA	20130321	US20120658968	20121024
US2013273957 AA	20131017	US20130914038	20130610
US2015133058 AA	20150514	US20140326486	20140709
US2015181599 AA	20150625	US20150636314	20150303
US2015189572 AA	20150702	US20150636328	20150303
US2015296382 AA	20151015	US20140305159	20140616
US2016057781 AA	20160225	US20150932181	20151104
US2017201889 AA	20170713	US20160386480	20161221
US2017201983 AA	20170713	US20160297752	20161019
US8027249 BB	20110927	US20060582496	20061018
US8055204 BB	20111108	US20070839503	20070815
US8155649 BB	20120410	US20090541624	20090814
US8184653 BB	20120522	US20070839496	20070815
US8326313 BB	20121204	US20090541621	20090814
US8559301 BB	20131015	US20110228882	20110909
US8755754 BB	20140617	US20120658968	20121024
US8767556 BB	20140701	US20120462302	20120502
US8793791 BB	20140729	US20110286745	20111101
US8818283 BB	20140826	US20090543790	20090819
US8997170 BB	20150331	US20070783563	20070410
US9215710 BB	20151215	US20150636314	20150303
US9288684 BB	20160315	US20130914038	20130610

US9491636 BB	20161108	US20150932181	20151104
US9538388 BB	20170103	US20090541616	20090814
US9854461 BB	20171226	US20140326486	20140709
US9900782 BB	20180220	US20160386480	20161221
WO08048523 A1	20080424	WO2007US21940	20071015
WO08140471 A1	20081120	WO2007US22356	20071019
WO09045646 A2	20090409	WO2008US73194	20080814
WO09045646 A3	20091112	WO2008US73194	20080814
WO09073254 A2	20090611	WO2008US73193	20080814
WO09073254 A3	20091105	WO2008US73193	20080814
WO10022156 A2	20100225	WO2009US54324	20090819
WO10022156 A3	20100603	WO2009US54324	20090819

Priority:

US20060432536	20060512	US20060582496	20061018	US20060877656P	20061229
US20070783563	20070410	US20070839503	20070815	US20070839496	20070815
WO2007US21940	20071015	WO2007US22356	20071019	WO2008US73193	20080814
WO2008US73194	20080814	US20080090076P	20080819	US20090487257	20090618
US20090541624	20090814	US20090541621	20090814	US20090541616	20090814
US20090543790	20090819	WO2009US54324	20090819	US20110228882	20110909
US20110286745	20111101	US20120462302	20120502	US20120658968	20121024
US20130914038	20130610	US20140305159	20140616	US20140326486	20140709
US20150636314	20150303	US20150636328	20150303	US20150932181	20151104
US20160297752	20161019	US20160386480	20161221		

Probable Assignee: SHARED SPECTRUM CO

Assignee(s): (std): BAZAROV IGOR ; BAZAROV IGOR ANATOLY ; DAIN DMITRY ; ERPEK TUGBA ; LIVSICS EUGENE ; SHARED SPECTRUM CO ; SHARED SPECTRUM COMPANY ; RITTERBUSH OLGA ; MCHENRY MARK A ; STEADMAN KARL ; LIVSICS JEVGENIJS ; PERICH FILIP ; MCHENRY MARK ALLEN ; RITTERBUSH OLGA K ; MCHENRY MARK ; NGUYEN THAO T N ; TENHULA PETER A ; TENHULA PETER ; STEADMAN KARL N ; ZHAO YOUPIING

Assignee(s): AFRL RIJ ; NGUYEN THAO TN

Inventor(s): (std): BAZAROV IGOR ANATOLY ; DAIN DMITRY ; ERPEK TUGBA ; LIVIS EUGENE ; LIVSICS EUGENE ; LIVSICS JEVGENIJS ; MCHENRY MARK ; MCHENRY MARK A ; NGUYEN THAO T N ; PERICH FILIP ; RITTERBUSH OLGA ; STEADMAN KARI N ; STEADMAN KARL ; TENHULA PETER ; TENHULA PETER A ; ZHAO YOUPIING ; STEADMAN KARL N ; RITTERBUSH OLGA K ; MCHENRY MARK ALLEN ; BAZAROV IGOR ; LIVSIS EUGENE

Inventor(s): NGUYEN THAO TN

Agent(s): FROST ALEX JOHN; BOULT WADE TENNANT; CLARK AND BRODY; TOWNSEND AND TOWNSEND AND CREW LLP; KILPATRICK TOWNSEND AND STOCKTON LLP; MORRIS AND KAMLAY LLP; BRODY CHRISTOPHER W; MEYER RICHARD S ET AL; KAMLAY AARON S ET AL; KAMLAY AARON S

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: SYSTEM AND METHOD FOR POLICING SPECTRUM USAGE

Abstract: Transferring spectrum use rights may include ascertaining information regarding available spectrum for use in wireless communications. A request for spectrum use from a spectrum user system may be matched with available spectrum. A spectrum certificate may be issued to the spectrum user system, where the spectrum certificate contains at least one spectrum-related variable under which the spectrum user system is to engage in wireless communications.

Classifications:

International (IPC 8-9): G06Q10/06 G06Q30/00 G06Q30/06

G06Q40/00 G06Q40/04 G06Q50/00 G06Q50/32 G06Q99/00

H04B17/00 H04B7/00 H04L12/26 H04N21/835 H04W16/14

H04W24/00 H04W28/16 H04W4/00 H04W72/04

H04W84/04 (Advanced/Invention);

H04W72/00 H04W72/04 (Advanced/Non-invention);

G06Q30/00 G06Q50/00 G06Q99/00 H04W16/00

H04W72/00 (Core/Invention)

CPC: G06Q99/00 G06Q10/063 G06Q10/06395 G06Q40/00

G06Q40/04 H04W72/042 H04W72/0426 G06Q50/32 Y02P90/90

European: G06Q10/063 G06Q10/06395 G06Q40/00 G06Q40/04

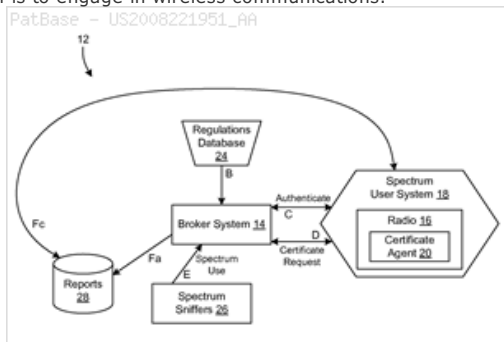
G06Q99/00 H04W72/04F4 T04W72/04F6

US: 1/1 370/252 370/310 370/328 370/338 455/452.2 455/500

455/500P 455/67.11 455/67.110S 705/1 705/1.1 705/1.100S 705/35

705/37 705/37P 705/37S 705/7 705/7.11 705/7.110S 705/7.41

705/7.410P 705/7P

**Family:**

Publication number	Publication date	Application number	Application date
AU2008222837 AA	20080912	AU20080222837	20080305
AU2008222837 AB	20091008	AU20080222837	20080305
AU2008222837 BB	20130214	AU20080222837	20080305
EP2118845 A2	20091118	EP20080731400	20080305
EP2118845 A4	20150408	EP20080731400	20080305
JP2010521105 T2	20100617	JP20090552849T	20080305
JP2013145564 A2	20130725	JP20130030373	20130219
JP5208138 B2	20130612	JP20090552849T	20080305
JP5576521 B2	20140820	JP20130030373	20130219
KR101531175 B1	20150624	KR20097020478	20080305
KR20100014708 A	20100210	KR20097020478	20080305
US2008221951 AA	20080911	US20080042649	20080305
US2008222019 AA	20080911	US20080042543	20080305
US2008222020 AA	20080911	US20080042626	20080305
US2008222021 AA	20080911	US20080042660	20080305
US2011055070 AA	20110303	US20100943305	20101110
US2011231302 AA	20110922	US20110152673	20110603
US2012142382 AA	20120607	US20120372789	20120214
US7958041 BB	20110607	US20080042660	20080305
US8041627 BB	20111018	US20080042626	20080305
US8139496 BB	20120320	US20080042649	20080305
US8234208 BB	20120731	US20100943305	20101110
US8249966 BB	20120821	US20080042543	20080305
US8885527 BB	20141111	US20110152673	20110603
US9129343 BB	20150908	US20120372789	20120214
WO08109641 A2	20080912	WO2008US55861	20080305
WO08109641 A3	20081023	WO2008US55861	20080305

Priority:

US20070893221P	20070306	US20070941863P	20070604	JP20090552849	20080305
JP20090552849T	20080305	US20080042626	20080305	US20080042543	20080305
US20080042660	20080305	US20080042649	20080305	WO2008US55861	20080305
US20100943305	20101110	US20110152673	20110603	US20120372789	20120214

Probable Assignee: QUALCOMM INC

Assignee(s): (std): ANANSI NETWORKS INC ; HAMILLA JOSEPH M ; KOOS LARRY W ; KOOS WILLIAM M ; STANFORTH PETER ; KOOS WILLIAM W ; SPECTRUM BRIDGE INC

Assignee(s): QUALCOMM INC

Inventor(s): (std): HAMILLA JOSEPH M ; KOOS LARRY W ; KOOS WILLIAM M ; KOOS WILLIAM W ; STANFORTH PETER ; WILLIAM M KOOS ; PETER STANFORTH ; LARRY W KOOS ; JOSEPH M HAMILLA

Agent(s): GRIFFITH HACK ; HILLERIMANN JOCHEN; RENNER OTTO BOISSELLE AND SKLAR LLP; TUCKER ELLIS LLP; GALIN M DAVID

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHODS AND SYSTEMS FOR A MOBILE, BROADBAND, ROUTABLE INTERNET

Abstract: In embodiments of the present invention improved capabilities are described for forming a mobile ad hoc network having a plurality of wireless communication links connecting a plurality of wireless mobile nodes. The present invention may apply a dynamic spectrum awareness algorithm to facilitate effective utilization of the available communications spectrum in an environment of the mobile ad hoc network, support both delay-sensitive and delay-tolerant traffic types on the mobile ad hoc network, and provide a defined quality of communications service for both the delay-sensitive and the delay-tolerant traffic.

Classifications:

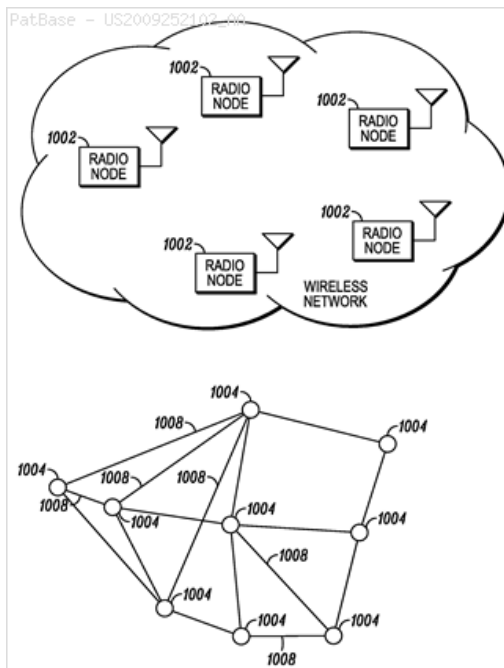
International (IPC 8-9): G06F15/16 H04B1/713 H04B15/00 H04B7/005 H04B7/212 H04B7/26 H04H20/71 H04J3/00 H04L1/00 H04L12/28 H04L12/56 H04L29/06 H04L29/12 H04N7/173 H04N7/20 H04W16/14 H04W16/18 H04W28/16 H04W4/00 H04W4/02 H04W40/00 H04W40/02 H04W40/04 H04W40/08 H04W40/12 H04W40/18 H04W40/20 H04W52/00 H04W56/00 H04W72/00 H04W72/04 H04W74/08 H04W80/02 H04W84/02 H04W84/18 H04W92/00 (Advanced/Invention); G06F15/16 H04B7/212 H04L12/28 H04L12/56 H04L29/06 H04W4/02 H04W40/04 H04W40/12 H04W40/18 H04W40/20 H04W84/18 (Advanced/Non-invention); H04B7/005 H04B7/26 H04J3/00 H04L12/28 H04N7/173 H04N7/20 H04W16/00 H04W4/00 H04W40/00 H04W40/02 H04W72/00 H04W84/18 (Core/Invention); G06F15/16 (Core/Non-invention)

International (IPC 1-7): H04B7/26 H04W84/18

CPC: H04W40/026 H04W40/02 H04W74/002 H04W74/0833 H04N21/4126 H04N21/43615 H04N21/43637 H04N21/6143 H04N21/6175 H04W56/0035 H04W56/0075 C02F1/4691 C02F1/283 C02F1/46114 C02F2001/46133 C02F2001/46161 C02F2201/46145 C02F2209/02 C02F2209/05 C02F2209/06 C02F2303/16 H04W48/14 H04J13/16 H04L25/0226 H04L25/03006 H04L27/2613 H04B17/345 H04W48/08 H04W72/12 H04W92/18 H04W40/08 H04L1/0002 H04L1/0003 H04L1/0009 H04L1/0015 H04L45/123 H04L45/308 H04L2001/0097 H04W16/18 H04W84/22 H04W40/20 Y02D70/1222 Y02D70/1224 Y02D70/1262 Y02D70/142 Y02D70/146 Y02D70/164 Y02D70/22 Y02D70/23 Y02D70/324 Y02D70/38 Y02D70/122 Y02D70/20 H04W84/18 H04W4/20

European: H04L1/00A8 H04L45/123 H04L45/308 H04N21/41P5 H04N21/4363W H04N21/436H H04N21/61D6 H04N21/61U3 H04W16/18 H04W4/20 H04W40/025 H04W40/08 H04W40/18 H04W40/20 H04W48/08 H04W56/00H H04W56/00M4B2 H04W74/00C H04W84/18 T04J13/16 T04L1/00A1 T04L1/00A1M T04L1/00A5 T04L1/00T11 T04L25/02C7A T04L25/03B T04L27/26M1R3 T04W16/18 T04W40/02 T04W40/20 T04W72/12 T04W74/08D T04W84/18 T04W84/22 T04W92/18

US: 370/252 370/252P 370/254 370/254P 370/255 370/255P 370/310 370/310P 370/312 370/312P 370/328 370/328P 370/329 370/329P 370/337 370/337S 370/338 370/338P 370/338S 370/345 370/345S 370/347 370/347S 370/400 370/400S 455/41.2 455/62 455/62P 709/205 709/205S 725/110 725/110S 725/119 725/119S 725/68 725/68P

**Family:**

Publication number	Publication date	Application number	Application date
CA2753536 AA	20090903	CA20092753536	20090227
CA2757647 AA	20091203	CA20092757647	20090403
EP2248387 A2	20101110	EP20090715862	20090227
EP2248387 A4	20110928	EP20090715862	20090227
EP2266365 A2	20101229	EP20090755494	20090403
EP2266365 A4	20111228	EP20090755494	20090403
EP2316248 A2	20110504	EP20090800978	20090722
EP2316248 A4	20110928	EP20090800978	20090722
EP2366261 A1	20110921	EP20090812336	20090904
EP2366261 A4	20130213	EP20090812336	20090904
IN01426KN2011 A	20110729	IN2011KN01426	20110404
IN01433KN2011 A	20160826	IN2011KN01433	20110404
IN01435KN2011 A	20160826	IN2011KN01435	20110404
IN03173KN2010 A	20111125	IN2010KN03173	20100827
IN03962KN2010 A	20101224	IN2010KN03962	20101022
IN04777KN2010 A	20110225	IN2010KN04777	20101214
KR20110050460 A	20110513	KR20117004043	20090722
KR20110061609 A	20110609	KR20117007836	20090904
KR20110061610 A	20110609	KR20117007838	20090904
KR20110063819 A	20110614	KR20117007837	20090904
MX2010009361 A1	20101110	MX2010009361	20090227
MX2010010913 A1	20101221	MX20100010913	20090403
MX2011000860 A1	20110315	MX20110000860	20090722
US2009252102 AA	20091008	US20090394860	20090227
US2009252134 AA	20091008	US20090418363	20090403
US2010142421 A1	20100610	US20090554729	20090904
US2010142445 AA	20100610	US20090554699	20090904
US2010142446 AA	20100610	US20090554754	20090904
US2010142447 AA	20100610	US20090554773	20090904
US2010142448 AA	20100610	US20090554821	20090904
US2010150027 A1	20100617	US20090634440	20091209
US2010150120 AA	20100617	US20090554807	20090904
US2010169937 AA	20100701	US20090613506	20091105
US2010316033 AA	20101216	US20100817114	20100616
US2011019652 AA	20110127	US20100815069	20100614
US2011110273 A1	20110512	US20090054275	20090904

US2011117852 AA	20110519	US20090054154	20090722
US2011164527 AA	20110707	US20090062166	20090904
US2011164546 AA	20110707	US20090062072	20090904
US2012106428 AA	20120503	US20110248945	20110929
US2012127977 AA	20120524	US20110165033	20110621
US8060017 BB	20111115	US20090418363	20090403
US8300615 BB	20121030	US20110165033	20110621
WO09108858 A2	20090903	WO2009US35465	20090227
WO09108858 A3	20091203	WO2009US35465	20090227
WO09146132 A2	20091203	WO2009US39479	20090403
WO09146132 A3	20100121	WO2009US39479	20090403
WO10011796 A2	20100128	WO2009US51467	20090722
WO10011796 A3	20100429	WO2009US51467	20090722
WO10028278 A2	20100311	WO2009US56089	20090904
WO10028278 A3	20100617	WO2009US56089	20090904
WO10028307 A1	20100311	WO2009US56126	20090904
WO10028311 A1	20100311	WO2009US56130	20090904
WO10028315 A1	20100311	WO2009US56134	20090904
WO10147977 A2	20101223	WO2010US38659	20100615
WO10147977 A3	20110331	WO2010US38659	20100615

Priority:

US20080031960P 20080227	US20080042431P 20080404	US20080042442P 20080404
US20080074930P 20080623	US20080082642P 20080722	US20080082618P 20080722
US20080084773P 20080730	US20080084738P 20080730	US20080086242P 20080805
US20080094394P 20080904	US20080094203P 20080904	US20080094183P 20080904
US20080094294P 20080904	US20080094310P 20080904	US20080094247P 20080904
US20080094231P 20080904	US20080094279P 20080904	US20080094591P 20080905
US20080094584P 20080905	US20080094594P 20080905	US20080094546P 20080905
US20080094611P 20080905	US20080095298P 20080908	US20080095310P 20080909
US20080103106P 20081006	US20080111384P 20081105	US20080112131P 20081106
US20080118232P 20081126	US20080121169P 20081209	US20090394860 20090227
WO2009US35465 20090227	US20090418363 20090403	WO2009US39479 20090403
US20090187656P 20090616	US20090054154 20090722	WO2009US51467 20090722
US20090554729 20090904	US20090554699 20090904	US20090554773 20090904
US20090554821 20090904	US20090554807 20090904	US20090054275 20090904
US20090062166 20090904	US20090062072 20090904	US20090554754 20090904
WO2009US56130 20090904	WO2009US56134 20090904	WO2009US56126 20090904
WO2009US56089 20090904	US20090613506 20091105	US20090634440 20091209
US20100313723P 20100313	US20100815069 20100614	US20100817114 20100616
US20110165033 20110621	US20110248945 20110929	

Probable Assignee: POWERWAVE COGNITION INC

Assignee(s): (std): COPELAND GREGORY C ; COPELAND GREGORY CLARK ; ELSON BRIAN B ; LARGE BRIAN C ; SEIDEL SCOTT Y ; SCHLICHT LUDGER ; SMITH JEFFREY E ; PATACA VICTOR M T ; MISHRA RAJESH K ; POWERWAVE COGNITION INC ; ATWAL PETER ; NORMAN PETER

Assignee(s): CHARLES A STANZIALE JR IN HIS CAPACITY CHAPTER 7 TRUSTEE OF POWERWAVE TECHNOLOGIES INC AS ; PATACA VICTOR MT

Inventor(s): (std): ATWAL PETER ; COPELAND GREGORY C ; COPELAND GREGORY CLARK ; MISHRA RAJESH K ; PATACA VICTOR M T ; SCHLICHT LUDGER ; SEIDEL SCOTT Y ; SMITH JEFFREY E ; NORMAN PETER ; LARGE BRIAN C ; ELSON BRIAN B ; ARTWAL PETER

Inventor(s): JEFFREY E SMITH ; GREGORY C COPELAND ; LUDGER SCHLICHT ; VICTOR MT PATACA ; VICTOR M T PATACA ; RAJESH K MISHRA ; PETER ARTWAL ; SMITH JEFFREY ; SCOTT Y SEIDEL ; SEIDEL SCOTT ; PATACA VICTOR MT ; PETER ATWAL ; PATACA VICTOR ; MISHRA RAJESH ; COPELAND GREGORY

Agent(s): SMART AND BIGGAR; NAISMITH ROBERT STEWART; STRATEGIC PATENTS PC; NORTRUP JOHN H ET AL; LEWKOWICZ PAUL E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: HIERARCHICAL DATA COLLECTION NETWORK SUPPORTING PACKETIZED VOICE COMMUNICATIONS AMONG WIRELESS TERMINALS AND TELEPHONES

Abstract: A packet-based, hierarchical communication system, arranged in a spanning tree configuration, is described in which wired and wireless communication networks exhibiting substantially different characteristics are employed in an overall scheme to link portable or mobile computing devices. The network accommodates real time voice transmission both through dedicated, scheduled bandwidth and through a packet-based routing within the confines and constraints of a data network. Conversion and call processing circuitry is also disclosed which enables access devices and personal computers to adapt voice information between analog voice stream and digital voice packet formats as proves necessary. Routing pathways include wireless spanning tree networks, wide area networks, telephone switching networks, internet, etc., in a manner virtually transparent to the user. A voice session and associate call setup simulates that of conventional telephone switching network, providing well-understood functionality common to any mobile, remote or stationary terminal, phone, computer, etc.

Classifications:

International (IPC 8-9): G06F1/16 G06F15/02 G06F17/40 G06F9/445

G06K17/00 G06K7/10 G06K7/12 G07F7/02 G07G1/00 H01Q1/22
H03C3/09 H04B7/005 H04L1/00 H04L1/16 H04L12/26 H04L12/28
H04L12/56 H04L12/66 H04L27/12 H04L27/14 H04L27/156 H04L29/06
H04L29/12 H04M1/253 H04W4/00 H04W48/18 H04W52/46
H04W88/02 H04W88/06 (Advanced/Invention);
H04B1/04 H04B1/16 H04L12/66 H04L29/08 H04M1/73 H04M7/00
H04W28/14 H04W4/18 H04W40/00 H04W40/02 H04W72/12
H04W76/02 H04W88/16 (Advanced/Non-invention);
G06F1/16 G06F15/02 G06F17/40 G06F9/445 G06K17/00 G06K7/10
G06K7/12 G07F7/00 G07G1/00 H01Q1/22 H03C3/00 H04B7/005
H04L1/00 H04L1/16 H04L12/28 H04L12/56 H04L27/10 H04L27/14
H04L27/156 H04L29/06 H04L29/12 H04W52/00
H04W88/00 (Core/Invention);
H04B1/04 H04B1/16 H04L29/08 H04M1/72 H04M7/00 H04W28/02
H04W40/02 H04W72/00 (Core/Non-invention)

CPC: H04M1/2535 G06F1/1626 G06F1/163 G06F15/0225

G06K7/10702 G06K7/10722 G06K7/10841 G06K7/10851 G06K7/10881 G06K7/1098 G06K7/12 G06K17/0022 G06K2017/0051
G06Q20/343 G07F7/02 G07G1/0045 H03C3/0908 H04B1/04 H04B1/1615 H04B7/0802 H04B7/10 H04L1/0002 H04L1/0003
H04L1/0025 H04L1/0032 H04L1/1671 H04L1/1685 H04L27/12 H04L27/14 H04L27/156 H04L29/06 H04L29/12009 H04L45/00
H04L45/48 H04L61/00 H04L65/103 H04L65/104 H04L65/1069 H04L65/1083 H04L65/80 H04M7/006 H04M2250/14 H04W4/18
H04W8/005 H04W28/14 H04W40/00 H04W40/02 H04W48/18 H04W52/0261 H04W52/04 H04W52/46 H04W72/12 H04W84/10
H04W88/06 H04W88/16 H04W92/02 H04L69/18 H04L69/32 H04W52/38 Y02D70/142 Y02D70/30 Y02D70/40 Y02D70/442
Y02D70/444 H04W76/10 H04W76/14 H04W76/22

European: G06F1/16P3 G06F1/16P5 G06F1/16P6 G06F15/02D G06F17/40 G06K17/00G G06K7/10S2P4D G06K7/10S4D
G06K7/10S9C G06K7/10S9D G06K7/10S9F G06K7/10S9V G06K7/12 G06Q20/343 G07F7/02 G07G1/00C2 H03C3/09A
H04L1/00A1 H04L1/00A1M H04L1/00A9A H04L1/00A9N H04L1/16F15 H04L1/16F17 H04L27/12 H04L27/14 H04L27/156
H04L29/06 H04L29/06M2N2M4 H04L29/06M2N2S4 H04L29/06M2S1 H04L29/06M2S4 H04L29/06M8 H04L29/12A H04L45/00
H04L45/48 H04L61/00 H04M1/253W H04W48/18 H04W52/02L H04W52/02T8 H04W52/46 H04W76/04C H04W84/10
H04W88/06 S06K17/00W10 T04B1/04 T04B1/16A2 T04B7/08B T04B7/10 T04L29/06K T04L29/08A T04M1/253W T04M250/14
T04M7/00M T04W28/14 T04W4/18 T04W40/00 T04W40/02 T04W52/04 T04W72/12 T04W76/02 T04W76/02D T04W8/00D
T04W88/06 T04W88/16 T04W92/02

US: 370/252 370/252P 370/328 370/328S 370/352 370/352S 370/401 370/466

Family:

Publication number	Publication date	Application number	Application date
US2010232312 AA	20100916	US20100727825	20100319
US7894423 BB	20110222	US20100727825	20100319

Priority:

US19950539817 19951005 US19980037535 19980310 US20020141506 20020508
US20040783477 20040220 US20100686195 20100112 US20100727825 20100319

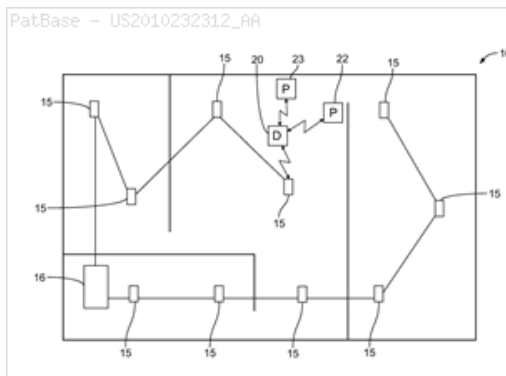
Probable Assignee: AVAGO TECHNOLOGIES LTD

Assignee(s): (std): BROADCOM CORP ; MORRIS MICHAEL D ; KUBLER JOSEPH J

Assignee(s): AVAGO TECHNOLOGIES GENERAL IP SINGAPORE PTE LTD ; AVAGO TECHNOLOGIES LTD ; BANK OF AMERICA NA COLLATERAL AGENT AS

Inventor(s): (std): KUBLER JOSEPH J ; MORRIS MICHAEL D

Agent(s): MCANDREWS HELD AND MALLOY LTD; MCANDREWS HELD AND MALLOY



Title: HIERARCHICAL DATA COLLECTION NETWORK SUPPORTING PACKETIZED VOICE COMMUNICATIONS AMONG WIRELESS TERMINALS AND TELEPHONES

Abstract: A packet-based, hierarchical communication system, arranged in a spanning tree configuration, is described in which wired and wireless communication networks exhibiting substantially different characteristics are employed in an overall scheme to link portable or mobile computing devices. The network accommodates real time voice transmission both through dedicated, scheduled bandwidth and through a packet-based routing within the confines and constraints of a data network. Conversion and call processing circuitry is also disclosed which enables access devices and personal computers to adapt voice information between analog voice stream and digital voice packet formats as proves necessary. Routing pathways include wireless spanning tree networks, wide area networks, telephone switching networks, internet, etc., in a manner virtually transparent to the user. A voice session and associate call setup simulates that of conventional telephone switching network, providing well-understood functionality common to any mobile, remote or stationary terminal, phone, computer, etc.

Classifications:

International (IPC 8-9): G06F1/16 G06F15/02 G06F17/40 G06F9/445

G06K17/00 G06K7/10 G06K7/12 G07F7/02 G07G1/00 H01Q1/22

H03C3/09 H04B7/005 H04L1/00 H04L1/16 H04L12/28 H04L12/56

H04L12/66 H04L27/12 H04L27/14 H04L27/156 H04L29/06 H04L29/12

H04M1/253 H04W4/00 H04W48/18 H04W52/46 H04W88/02

H04W88/06 (Advanced/Invention);

H04B1/04 H04B1/16 H04L29/08 H04M1/73 H04M7/00 H04W28/14

H04W4/18 H04W40/00 H04W40/02 H04W72/12 H04W76/02

H04W88/16 (Advanced/Non-invention);

G06F1/16 G06F15/02 G06F17/40 G06F9/445 G06K17/00 G06K7/10

G06K7/12 G07F7/00 G07G1/00 H01Q1/22 H03C3/00 H04B7/005

H04L1/00 H04L1/16 H04L12/56 H04L27/10 H04L27/14 H04L27/156

H04L29/06 H04L29/12 H04W4/00 H04W52/00

H04W88/00 (Core/Invention);

H04B1/04 H04B1/16 H04L29/08 H04M1/72 H04M7/00 H04W28/02

H04W40/02 H04W72/00 (Core/Non-invention)

CPC: H04M1/2535 G06F1/1626 G06F1/163 G06F15/0225 G06K7/10702 G06K7/10722 G06K7/10841

G06K7/10851 G06K7/10881 G06K7/1098 G06K7/12 G06K17/0022 G06K2017/0051 G06Q20/343 G07F7/02 G07G1/0045

H03C3/0908 H04B1/04 H04B1/1615 H04B7/0802 H04B7/10 H04L1/0002 H04L1/0003 H04L1/0025 H04L1/0032 H04L1/1671

H04L1/1685 H04L27/12 H04L27/14 H04L27/156 H04L29/06 H04L29/12009 H04L45/00 H04L45/48 H04L61/00 H04L65/103

H04L65/104 H04L65/1069 H04L65/1083 H04L65/80 H04M7/006 H04M2250/14 H04W4/18 H04W8/005 H04W28/14 H04W40/00

H04W40/02 H04W48/18 H04W52/0261 H04W52/04 H04W52/46 H04W72/12 H04W84/10 H04W88/06 H04W88/16 H04W92/02

H04L69/18 H04L69/32 H04W52/38 Y02D70/142 Y02D70/30 Y02D70/40 Y02D70/442 Y02D70/444 H04W76/10 H04W76/14

H04W76/22

European: G06F1/16P3 G06F1/16P5 G06F1/16P6 G06F15/02D G06F17/40 G06K17/00G G06K7/10S2P4D G06K7/10S4D

G06K7/10S9C G06K7/10S9D G06K7/10S9F G06K7/10S9V G06K7/12 G06Q20/343 G07F7/02 G07G1/00C2 H03C3/09A

H04L1/00A1 H04L1/00A1M H04L1/00A9A H04L1/00A9N H04L1/16F15 H04L1/16F17 H04L27/12 H04L27/14 H04L27/156

H04L29/06 H04L29/06M2N2M4 H04L29/06M2N2S4 H04L29/06M2S1 H04L29/06M2S4 H04L29/06M8 H04L29/12A H04L45/00

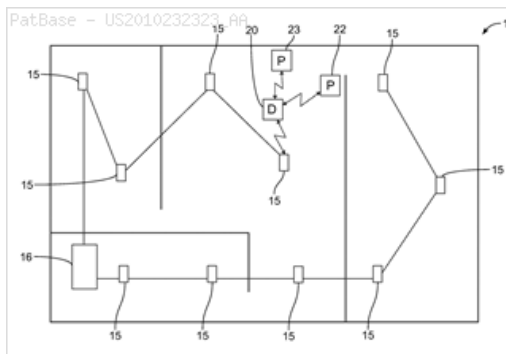
H04L45/48 H04L61/00 H04M1/253W H04W48/18 H04W52/02L H04W52/02T8 H04W52/46 H04W76/04C H04W84/10

H04W88/06 S06K17/00W10 T04B1/04 T04B1/16A2 T04B7/08B T04B7/10 T04L29/06K T04L29/08A T04M1/253W T04M250/14

T04M7/00M T04W28/14 T04W4/18 T04W40/00 T04W40/02 T04W52/04 T04W72/12 T04W76/02 T04W76/02D T04W8/00D

T04W88/06 T04W88/16 T04W92/02

US: 370/256 370/256P 370/356 370/356S

**Family:**

Publication number	Publication date	Application number	Application date
US2010232323 AA	20100916	US20100749320	20100329

Priority:

US19950539817 19951005	US19980037535 19980310	US20020141506 20020508
US20040822447 20040408	US20100749320 20100329	

Probable Assignee: AVAGO TECHNOLOGIES LTD

Assignee(s): (std): MORRIS MICHAEL D ; KUBLER JOSEPH J

Assignee(s): AVAGO TECHNOLOGIES GENERAL IP SINGAPORE PTE LTD ; AVAGO TECHNOLOGIES LTD ; BANK OF AMERICA NA COLLATERAL AGENT AS ; BROADCOM CORP

Inventor(s): (std): KUBLER JOSEPH J ; MORRIS MICHAEL D

Agent(s): MCANDREWS HELD AND MALLOY LTD

Title: METHOD, COMPUTER PROGRAM, AND ALGORITHM FOR COMPUTING NETWORK SERVICE VALUE PRICING BASED ON COMMUNICATION SERVICE EXPERIENCES DELIVERED TO CONSUMERS AND MERCHANTS OVER A SMART MULTI-SERVICES (SMS) COMMUNICATION NETWORK

Abstract: A system and method for providing multi-services within a communication network according to various exemplary embodiments can include storing, in a database of a computer, user-defined sets of rules and instructions for providing multi-services to end user devices connected to a communication network comprising a Hybrid Fiber-Wireless (HFW) network having policy management capabilities. The system and method can receive, at one or more processors, the user-defined sets of rules and instructions from a plurality of end users via a plurality of end user devices. The system and method can configure a virtual network for each end user within the communication network using the policy management capabilities based on the user-defined sets of rules and instructions provided by each end user. The user-defined sets of rules and instructions define provisioning and delivery of resources and services provided by the communication network to the end user.

Classifications:

International (IPC 8-9): G06F15/16 G06F15/173 G06F15/177 G06F17/00 G06F21/00 G06Q10/00 G06Q30/00 G06Q30/06 G06Q50/00 G06Q50/18 H04B10/00 H04B10/08 H04B10/12 H04B15/00 H04B17/345 H04J1/12 H04L12/14 H04L12/24 H04L12/46 H04L12/64 H04L29/08 H04L9/00 H04M15/00 H04M7/00 H04W24/02 H04W24/08 H04W36/14 H04W36/32 H04W4/00 H04W4/14 H04W4/50 H04W52/24 H04W64/00 (Advanced/Invention); H04L29/06 H04W16/14 (Advanced/Non-invention)

CPC: G06Q30/0631 G06Q50/188 H04L12/14 H04L41/5029 H04L41/5067 H04L67/306 H04M15/8016 H04W64/00 H04L67/1068 H04W36/14 H04W36/32 H04M7/0063 H04W4/14 H04L41/5019 H04L12/6418 H04M15/8083 H04L2012/6421 H04L41/0803 H04W4/50 H04W16/14 H04B2215/00 H04W52/245 H04W24/08 H04W24/02 H04B17/345 H04B15/00 H04W52/247 H04W52/244 H04B17/26

European: G06Q30/0631 G06Q50/188 H04L12/14 H04L12/24S1D H04L12/24S4B H04L29/08N29U H04L41/50C H04L41/50J2

US: 1/1 370/201 398/115 398/115S 398/25 398/25P 455/406 705/26.7 705/26.700S 705/50 705/50S 705/52 705/80 705/80S 709/201 709/220 709/226 709/229 726/1 726/1S



Family:

Publication number	Publication date	Application number	Application date
US2011243553 AA	20111006	US20100752087	20100331
US2013304878 AA	20131114	US20120727511	20121226
US2016255205 AA	20160901	US20160151405	20160510
US2017099115 AA	20170406	US20160284427	20161003
US2018007214 A9	20180104	US20160151405	20160510
US2018115652 AA	20180426	US20170846188	20171218
US2018176390 AA	20180621	US20180890311	20180206
US8332517 BB	20121211	US20100752087	20100331
US9338054 BB	20160510	US20120727511	20121226
US9888129 BB	20180206	US20160151405	20160510
US10003412 BB	20180619	US20160284427	20161003
WO11123594 A2	20111006	WO2011US30655	20110331
WO11123594 A9	20111208	WO2011US30655	20110331

Priority:

US20100752087	20100331	US20120710339	20121210	US20120727511	20121226
US20150235865P	20151001	US20160151405	20160510	US20160284427	20161003
US20170846188	20171218	US20180890311	20180206		

Probable Assignee: INCNETWORKS INC

Assignee(s): (std): INCNETWORKS INC ; MILLER II ROBERT R ; RUSSELL JESSE E ; RUSSELL JESSEE E

Inventor(s): (std): RUSSELL JESSE E ; RUSSELL JESSEE E ; MILLER II ROBERT R

Agent(s): DOSTER GREENE LLC; DOSTER GREENE DINNATIA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: DYNAMIC SPECTRUM MANAGEMENT

Abstract: A wireless transmit/receive unit (WTRU) and a dynamic spectrum management (DSM) engine are described. The WTRU includes a transceiver, a radio frequency (RF) spectrum sensing unit and a processing unit. The transceiver transmits over a wireless link. The RF spectrum sensing unit measures information indicative of usage of a spectrum by other devices. The processing unit detects a change in performance of the wireless link, controls the transceiver to transmit a notification to a DSM engine indicating that the change in the performance of the wireless link was detected on a condition that the processing unit detects the change in performance of the wireless link, and receives a sensing task request for the WTRU to measure the information indicative of the usage of the spectrum by other devices based on the notification transmitted to the DSM engine indicating that the change in the performance of the wireless link was detected.

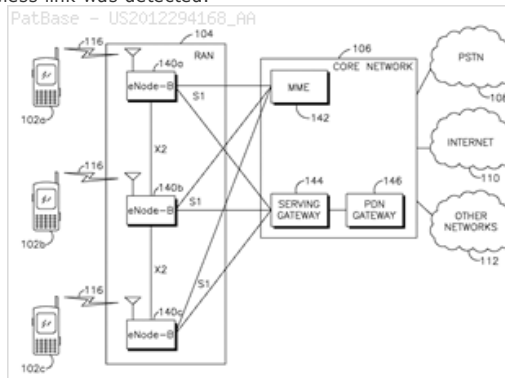
Classifications:

International (IPC 8-9): H04B1/00 H04L12/24 H04W16/10 H04W16/14 H04W24/00 H04W24/10 H04W72/04 (Advanced/Invention); H04W72/00 H04W72/04 (Advanced/Non-invention)

CPC: H04W24/10 H04B1/0067 H04W72/00 H04W72/0453

European: H04B1/00M6 H04W24/10 T04W72/00 T04W72/04H4

US: 370/252 370/329

**Family:**

Publication number	Publication date	Application number	Application date
CN103314610 A	20130918	CN201180052882	20111101
CN103314610 B	20180608	CN201180052882	20111101
EP2636238 A1	20130911	EP20110788936	20111101
JP2013543349 T2	20131128	JP20130537763T	20111101
JP2015136192 A2	20150727	JP20150095165	20150507
JP5746359 B2	20150708	JP20130537763T	20111101
JP6196259 B2	20170913	JP20150095165	20150507
KR101608567 B1	20160401	KR20137014054	20111101
KR101738540 B1	20170523	KR20137021911	20111101
KR20130088163 A	20130807	KR20137014054	20111101
KR20130102130 A	20130916	KR20137021911	20111101
KR20170058451 A	20170526	KR20177013185	20111101
TW201234878 A	20120816	TW20110139751	20111101
TW201811075 A	20180316	TW20160137533	20111101
TWI569654 B	20170201	TW20110139751	20111101
TWI611707 B	20180111	TW20160137533	20111101
US2012294168 AA	20121122	US20110286610	20111101
US9769692 BB	20170919	US20110286610	20111101
WO12061383 A1	20120510	WO2011US58781	20111101

Priority:

US20100408808P 20101101	US20100410712P 20101105	US20100423419P 20101215
JP20130537763 20111101	JP20130537763T 20111101	US20110286610 20111101
WO2011US58781 20111101	JP20150095165 20150507	

Probable Assignee: INTERDIGITAL PATENT HOLDINGS INC

Assignee(s): (std): CHINCHOLI AMITH V ; DEMIR ALPASLAN ; FRED A MARTINO M ; GAUVREAU JEAN LOUIS ; GOPALAN RAMYA ; GOPALAN SOWMYA ; INTERDIGITAL PATENT HOLDINGS INC ; LEITHEAD PHILLIP L ; TOUAG ATHMANE ; INTERDIGITAL PATENT HOLDINGS

Inventor(s): (std): AMITH V CHINCHOLI ; ATHMANE TOUAG ; CHINCHOLI AMITH V ; DEMIR ALPASLAN ; FRED A MARTINO M ; GAUVREAU JEAN LOUIS ; GOPALAN RAMYA ; GOPALAN SOWMYA ; JEAN LOUIS GAUVREAU ; LEITHEAD PHILLIP L ; MARTINO M FRED A ; PHILLIP L LEITHEAD ; RAMYA GOPALAN ; SOWMYA GOPALAN ; TOUAG ATHMANE

Agent(s): JOHANSSON MAGNUS; TANI AND ABE PC; CONDO ROCCIA KOPTIW LLP; KERNER DAWN C

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: INTELLIGENT BACKHAUL RADIO AND ANTENNA SYSTEM

Abstract: A intelligent backhaul radio have an advanced antenna system for use in PTP or PMP topologies. The antenna system provides a significant diversity benefit. Antenna configurations are disclosed that provide for increased transmitter to receiver isolation, adaptive polarization and MIMO transmission equalization. Adaptive optimization of transmission parameters based upon side information provided in the form of metric feedback from a far end receiver utilizing the antenna system is also disclosed.

Classifications:

International (IPC 8-9): G06F9/445 H01Q1/24 H01Q1/38 H01Q1/48 H01Q1/50 H01Q13/10 H01Q21/00 H01Q21/06 H01Q21/08 H01Q21/20 H01Q21/24 H01Q21/26 H01Q21/29 H01Q25/00 H01Q3/00 H01Q3/26 H01Q5/50 H01Q9/00 H01Q9/04 H01Q9/28 H04B1/00 H04B1/04 H04B1/38 H04B1/401 H04B1/50 H04B1/54 H04B1/711 H04B10/25 H04B15/00 H04B7/04 H04B7/0408 H04B7/06 H04B7/08 H04B7/10 H04K3/00 H04L1/00 H04L12/24 H04L12/751 H04L25/03 H04L27/01

H04L27/26 H04L29/08 H04L5/00 H04L5/14 H04W16/14 H04W24/02 H04W24/08 H04W28/06 H04W28/18 H04W4/00 H04W48/16 H04W52/52 H04W72/00 H04W72/04 H04W72/08 H04W72/12 H04W74/08 H04W76/02 H04W76/04 H04W80/04 H04W84/12 H04W84/18 H04W88/06 H04W88/08 H04W88/10 H04W88/16 H05B7/14 (Advanced/Invention); H01Q3/26 H04B1/04 H04B7/0413 H04B7/06 H04B7/10 H04L1/00 H04L1/16 H04L1/18 H04L25/03 H04L27/26 H04W28/06 H04W28/18 H04W52/36 H04W72/04 H04W76/04 H04W84/18 H04W92/20 (Advanced/Non-invention)

CPC: H01Q21/0075 H01Q21/26 H04B7/0695 H04B7/088 H04B10/25 H04L1/0001 H04L1/004 H04L1/18 H04L5/0007 H04L25/03828 H04L27/2601 H04L27/2636 H01Q9/285 H04K3/224 H04K3/226 H04K3/28 H04K3/822 H04K2203/32 H04K2203/36 H04W16/14 H04W72/082 H04K2203/16 H04K2203/18 H01Q21/29 H04L27/265 H04L2025/03414 H01Q1/50 H01Q21/0018 H01Q21/062 H01Q21/28 H04B1/38 H04B1/525 H04W72/02 H04W88/08 H04B1/711 H04B7/0632 H04B1/0475 H04W24/08 H04B7/0617 H04B7/0634 H01Q9/0407 H04W72/0406 H04W84/18 H04B1/50 H04L27/01 H04W52/367 H01Q21/08 H04W72/0413 H04L41/0803 H04L45/02 H04W72/044 H04W72/1205 H04B7/0469 H04L5/1469 H04L5/14 H04W72/08 H04L67/34 G06F8/65 H04B7/0691 H04B7/0874 H04W74/04 H04W88/14 H01Q1/48 H01Q21/064 H04L5/0064 H04L5/008 H04L5/1438 H04L5/0062 H04L25/03019 H04L27/2678 H04W92/02 H04B7/0697 H04B7/10 H04W48/16 H04L5/0085 H04L5/1423 H04L5/1461 H04B1/54 H04B15/00 H04W72/0486 H04W84/042 H01Q5/50 H04W72/046 H04W72/048 H01Q3/2617 H04J1/00 H04W92/045 H04B7/0408 H04B1/401 H01Q21/20 H04W4/00 H04W88/16 H01Q9/0485 H01Q9/0414 H04B7/0413 H04W24/02 H04W28/18 H04W76/15 H01Q21/065 H01Q1/246 H01Q21/24 H04B17/318 H04W52/42 H04W72/0453 H01Q25/00 H01Q25/005 H04B7/04 H04B2001/0408 H04L1/0003 H04L1/0009 H04L1/1607 H04W52/52 H04W72/04 H04W76/27 H04W84/12 H04W92/20 Y02D70/12 H01Q3/24 H01Q21/061 H01Q21/205 H04L5/0023 H04L5/0048 H04L25/0202 H04L25/03006 H04L5/0028 H04L5/006 H04L5/143 H04L27/0008

US: 1/1 342/359 342/361 343/745 343/747 343/795 343/797 343/810 343/853 343/893 370/210 370/278 370/280 370/281 370/310 370/315 370/328 370/329 370/334 370/338 370/341 370/342 370/480 375/146 375/219 375/267 455/450 455/452.1 455/454 455/461 455/500 455/507 455/509 455/515 455/561 455/562.1 455/67.13 455/73 455/90.2

PatBase - US2013044028_A9

**Family:**

Publication number	Publication date	Application number	Application date
EP2745539 A1	20140625	EP20120824072	20120808
EP2745539 A4	20150819	EP20120824072	20120808
EP2843863 A1	20150304	EP20140177662	20140718
EP2907239 A2	20150819	EP20130835999	20130910
US2013044028 AA	20130221	US20120536927	20120628
US2013100897 AA	20130425	US20120645472	20121004
US2013273974 AA	20131017	US20130898429	20130520
US2013343440 AA	20131226	US20130767796	20130214
US2014106688 AA	20140417	US20130108200	20131216
US2014120966 AA	20140501	US20140151190	20140109
US2014184455 AA	20140703	US20140197158	20140304
US2014184457 AA	20140703	US20140199734	20140306
US2014329562 AA	20141106	US20140336958	20140721
US2015016362 AA	20150115	US20140337744	20140722
US2015016561 AA	20150115	US20140502471	20140930
US2015049720 AA	20150219	US20140498959	20140926
US2015084826 AA	20150326	US20140559859	20141203
US2015103745 AA	20150416	US20140572725	20141216
US2015139160 AA	20150521	US20150608024	20150128
US2015194999 AA	20150709	US20150632624	20150226
US2015200709 AA	20150716	US20150666294	20150323
US2015223082 AA	20150806	US20150688550	20150416
US2015223250 AA	20150806	US20150686674	20150414
US2015230105 AA	20150813	US20150624365	20150217
US2016013831 AA	20160114	US20150837797	20150827
US2016095107 AA	20160331	US20150964292	20151209
US2016135192 AA	20160512	US20160988578	20160105
US2016192374 AA	20160630	US20160600013	20160303
US2016248467 AA	20160825	US20160142793	20160429
US2016285611 AA	20160929	US20160050009	20160222
US2016316477 AA	20161027	US20160203658	20160706
US2017026978 AA	20170126	US20160285354	20161004
US2017054545 AA	20170223	US20160291968	20161012
US2017118760 AA	20170427	US20170398174	20170104
US2017126291 AA	20170504	US20170408364	20170117
US2017127399 AA	20170504	US20170403090	20170110
US2017127421 AA	20170504	US20170403713	20170111
US2017201025 AA	20170713	US20170470080	20170327
US2017251484 AA	20170831	US20170595172	20170515
US2017311307 AA	20171026	US20170648860	20170713
US2017317725 AA	20171102	US20170651270	20170717
US2017318482 AA	20171102	US20170651207	20170717
US2017318571 AA	20171102	US20170651234	20170717

US2017318589 AA	20171102	US20170651707	20170717
US2018084553 AA	20180322	US20170825004	20171128
US2018092099 AA	20180329	US20170825032	20171128
US2018145721 AA	20180524	US20180873251	20180117
US8238318 BA	20120807	US20110212036	20110817
US8311023 BA	20121113	US20120371366	20120210
US8422540 BA	20130416	US20120609156	20120910
US8467363 BB	20130618	US20120536927	20120628
US8638839 BB	20140128	US20130767796	20130214
US8811365 BB	20140819	US20120645472	20121004
US8824442 BB	20140902	US20130898429	20130520
US8872715 BB	20141028	US20140199734	20140306
US8928542 BB	20150106	US20140197158	20140304
US8948235 BB	20150203	US20130108200	20131216
US8982772 BB	20150317	US20140151190	20140109
US8989762 BA	20150324	US20130098456	20131205
US9001809 BB	20150407	US20140336958	20140721
US9049611 BB	20150602	US20140498959	20140926
US9055463 BB	20150609	US20140337744	20140722
US9178558 BB	20151103	US20150632624	20150226
US9282560 BB	20160308	US20150686674	20150414
US9313674 BB	20160412	US20150688550	20150416
US9345036 BB	20160517	US20150608024	20150128
US9350411 BB	20160524	US20150837797	20150827
US9408215 BB	20160802	US20160988578	20160105
US9474080 BB	20161018	US20160060013	20160303
US9490918 BB	20161108	US20140572725	20141216
US9577700 BB	20170221	US20160142793	20160429
US9578643 BB	20170221	US20160203658	20160706
US9609530 BB	20170328	US20140559859	20141203
US9655133 BB	20170516	US20160285354	20161004
US9712216 BB	20170718	US20170408364	20170117
US9713019 BB	20170718	US20150624365	20150217
US9713155 BB	20170718	US20170403713	20170111
US9713157 BB	20170718	US20170403090	20170110
US9876530 BB	20180123	US20150666294	20150323
US10051643 BB	20180814	US20170595172	20170515
WO13025413 A1	20130221	WO2012US49948	20120808
WO14040083 A2	20140313	WO2013US59095	20130910
WO14040083 A3	20150716	WO2013US59095	20130910

Priority:

US20110212036	20110817	US20110271051	20111011	US20120371366	20120210
US20120371346	20120210	US20120415778	20120308	US20120448294	20120416
US20120662809P	20120621	US20120663461P	20120622	US20120536927	20120628
WO2012US49948	20120808	US20120609156	20120910	US20120632993	20121001
US20120632961	20121001	US20120633028	20121001	US20120645472	20121004
US20130748544	20130123	US20130763530	20130208	US20130767796	20130214
US20130898429	20130520	US20130934175	20130702	US20130857661P	20130723
WO2013US59095	20130910	US20130910194P	20131129	US20130098456	20131205
US20130108200	20131216	US20140146891	20140103	US20140151190	20140109
US20140197158	20140304	US20140199734	20140306	US20140336958	20140721
US20140337744	20140722	US20140498959	20140926	US20140502471	20140930
US20140535972	20141107	US20140552431	20141124	US20140559859	20141203
US20140572725	20141216	US20150608024	20150128	US20150624365	20150217
US20150632624	20150226	US20150130100P	20150309	US20150135573P	20150319
US20150666294	20150323	US20150686674	20150414	US20150688550	20150416
US20150837797	20150827	US20150839018	20150828	US20150950354	20151124
US20150964292	20151209	US20150983059	20151229	US20160988578	20160105
US20160050009	20160222	US20160060013	20160303	US20160084867	20160330
US20160142793	20160429	US20160165504	20160526	US20160203658	20160706
US20160361959P	20160713	US20160285354	20161004	US20160291968	20161012
US20160427034P	20161128	US20160427055P	20161128	US20160430213P	20161205
US20160430229P	20161205	US20170398174	20170104	US20170403090	20170110
US20170403713	20170111	US20170408364	20170117	US20170470080	20170327
US20170595172	20170515	US20170648860	20170713	US20170651270	20170717
US20170651234	20170717	US20170651207	20170717	US20170651707	20170717
US20170825004	20171128	US20170825032	20171128	US20180873251	20180117

Probable Assignee: SKYLINE PARTNERS TECHNOLOGY LLC

Assignee(s): (std): LEA DAVID ANDREW G ; NEGUS KEVIN J ; PROCTOR JR JAMES A ; PROCTOR JAMES A ; CBF NETWORKS INC ; SKYLINE PARTNERS TECH LLC

Assignee(s): COMERICA BANK ; FASTBACK ASSIGNMENT FOR BENEFIT OF CREDITORS LLC ; SKYLINE PARTNERS TECHNOLOGY LLC

Inventor(s): (std): BOYER COLBY ; DUFFY KEVIN J ; FISCHER JEFFREY ; GANDHAM KISHORE ; GHOSH SAGNIK ; ISHIGURO ARTHUR ; LEA DAVID ANDREW G ; NEGUS KEVIN J ; NEGUS KEVIN J ; PROCTOR JAMES A ; PROCTOR JR JAMES A ; RAJA ADNAN ; VARADARAJAN BADR ; VARADARAJAN BADRI

Agent(s): AHNER PHILIPPE; BREVALEX; NIXON PEABODY LLP; JENNIFER; HAYES JENNIFER; HAYES JENNIFER ET AL

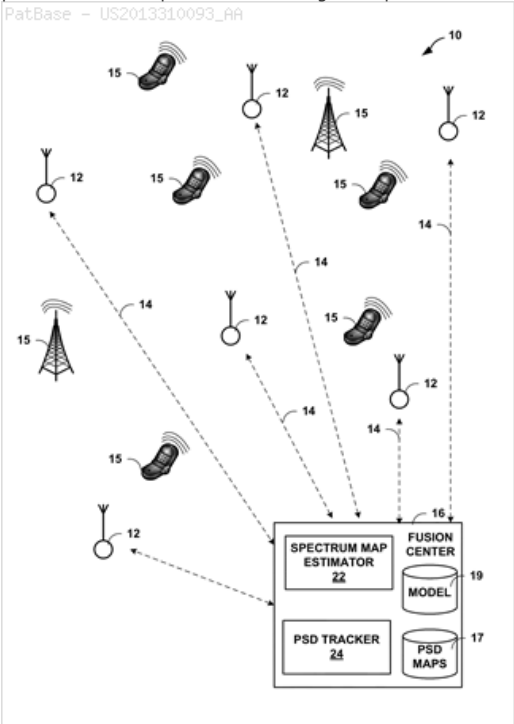
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: NON-PARAMETRIC POWER **SPECTRAL** DENSITY (PSD) MAP CONSTRUCTION

Abstract: This disclosure describes techniques for constructing power **spectral** density (PSD) maps representative of the distribution of radio frequency (RF) power as a function of both frequency and space (geographic location). For example, the disclosure describes techniques for construction PSD maps using non-parametric basis pursuit form of signal expansion.

Classifications:

International (ipc 8-9): H04M1/00 H04W16/14
H04W24/02 (Advanced/Invention);
H04W16/18 H04W16/22 (Advanced/Non-invention)
CPC: H04W16/14 H04W16/18 H04W16/22 H04W24/02
US: 1/1 455/501



Family:

Publication number	Publication date	Application number	Application date
US2013310093 AA	20131121	US20130899374	20130521
US9191831 BB	20151117	US20130899374	20130521

Priority:

US20120649793P 20120521 US20130899374 20130521

Probable Assignee: OF MINNESOTA UNIV

Assignee(s): (std): NAT SCIENCE FOUNDATION ; UNIV MINNESOTA

Assignee(s): NATIONAL SCIENCE FOUNDATION ; OF MINNESOTA UNIV

Inventor(s): (std): MATEOS GONZALO ; GIANNAKIS GEORGIOS B ; BAZERQUE JUAN ANDRES

Agent(s): SHUMAKER AND SIEFFERT PA