

1) Family number: 50663091 (US2012044807A)

© PatBase

Title: METHOD AND SYSTEM FOR ENFORCING TRAFFIC POLICIES AT A POLICY ENFORCEMENT POINT IN A WIRELESS COMMUNICATIONS NETWORK

Abstract: Embodiments of a method and system for enforcing a traffic policy at a Policy Enforcement Point (PEP) that controls the flow of traffic in a wireless communications network are described. In one embodiment, a method involves learning the topology of the wireless communications network, defining a virtual PEP (VPEP) within the topology of the wireless communications network, the VPEP comprising a location component that is remote from the PEP, associating a traffic policy with the VPEP, associating a traffic flow with the VPEP if the traffic flow has a characteristic that corresponds to the location component of the VPEP, and enforcing, at the PEP, the traffic policy that is associated with the VPEP against the traffic flow.

Classifications:

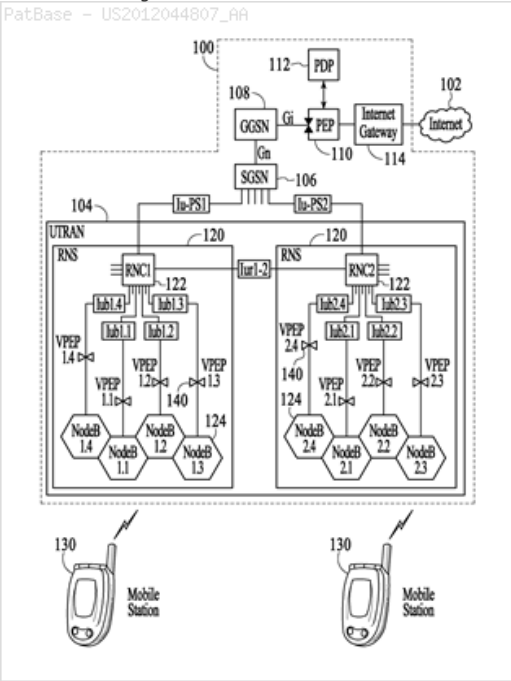
International (IPC 8-9): G01R31/08 G06F15/173

H04W28/10 (Advanced/Invention)

CPC: H04L47/14 H04L47/20 H04L47/41

European: H04L47/20 H04L47/41 T04L47/14

US: 370/231 370/231P 370/353



Family:

Publication number	Publication date	Application number	Application date
US2012044807 AA	20120223	US20100859471	20100819
US8401006 BB	20130319	US20100859471	20100819
WO12024649 A1	20120223	WO2011US48516	20110819

Priority:

US20100859471 20100819

Probable Assignee: UNWIRED PLANET IP MANAGER LLC

Assignee(s): (std): HALLIGAN MATT ; JOHNSON DREW ; JOHNSON DREW S ; MCGINNITY SHAUN ; OPENWAVE SYS INC ; SAN MARTIN MARCELO C ; UNWIRED PLANET INC

Assignee(s): UNWIRED PLANET IP MANAGER LLC ; UNWIRED PLANET LLC ; OPENWAVE SYSTEMS INC

Inventor(s): (std): JOHNSON DREW S ; JOHNSON DREW ; HALLIGAN MATT ; SAN MARTIN MARCELO C ; MCGINNITY SHAUN

Agent(s): WILSON MARK A

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 QA 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

2) Family number: 32288101 (US6954454B)

© PatBase

Title: ARCHITECTURE FOR A CENTRAL OFFICE USING IP TECHNOLOGY

Abstract: A telephony system and method having a switch for analog voice and data signals that is connected to a first network, and a router for routing Internet Protocol packets that is connected to a second network using Internet Protocol addressing. The telephony system and method also includes a telephony gateway that is connected to both the switch and the router for

converting analog voice signals into Internet Protocol packets and for converting Internet Protocol packets into analog voice signals, the telephony gateway being connected, and a remote access server that is connected to both the switch and the router for converting analog data signals into Internet Protocol packets and for converting Internet Protocol packets into analog data signals. The switch may have a switch matrix capable of being connected to the Public Switched Telephone Network, a line rack with a plurality of line cards connected to the switch matrix, and a trunk rack with a plurality of trunk cards connected to the switch matrix. The switch matrix may also be connected to the telephony gateway and the remote access server.

Classifications:

International (IPC 8-9): H04L12/56 H04L12/66 (Advanced/Invention);

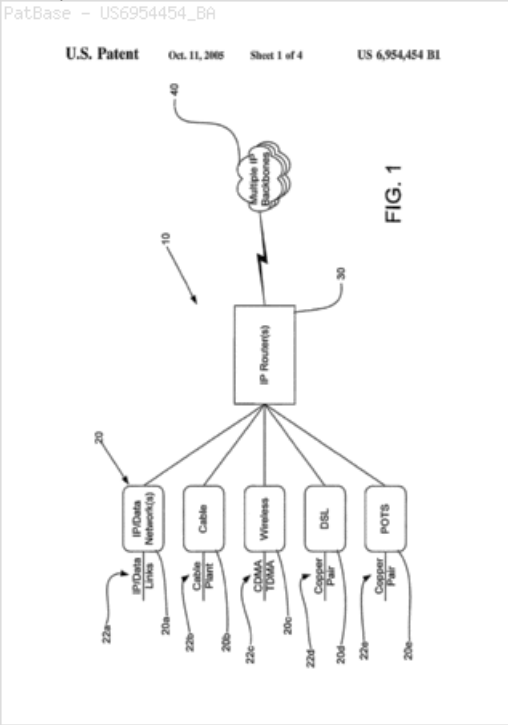
H04L12/56 H04L12/66 (Core/Invention)

International (IPC 1-7): H04L12/66

CPC: H04L12/56

European: H04L12/56

US: 370/352 370/356



Family:

Publication number	Publication date	Application number	Application date
US6954454 BA	20051011	US19990303514	19990503

Priority:

US19990303514 19990503

Probable Assignee: 3COM CORP

Assignee(s): (std): UT STARCOM INC

Assignee(s): UTSTARCOM INC ; 3COM CORP

Inventor(s): (std): BORELLA MICHAEL S ; KOSTAS THOMAS J ; GRABIEC JACEK A ; GRABELSKY DAVID ; MAHLER JERRY J ; SIDHU IKHLAQ S ; SCHUSTER GUIDO M

Agent(s): MCDONNELL BOEHNNEN HULBERT AND BERGHOFF LLP

3) Family number: 62067103 (US2017295103A) © PatBase

Title: DYNAMIC POLICY CONTROL

Abstract: Systems, methods, and apparatus embodiments are described herein for controlling policy in integrated small cell and Wi-Fi networks (ISWNs). It is recognized herein that multiple actors within an ISWN may have needs or preferences that conflict with each other, and that the best way of reconciling those conflicting needs is not always to simply give one actor preference over another. As described herein, optimum management decisions may be dynamically based on current network conditions and preferences of multiple actors.

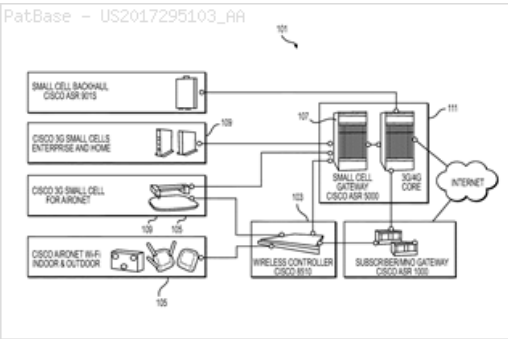
Classifications:

International (IPC 8-9): H04L12/24 H04L12/26 H04L12/801 H04L12/803 H04L12/813 H04L12/851 H04W16/16 H04W28/00 H04W28/02 H04W28/08 H04W28/12 H04W28/16 H04W28/18 H04W4/00 H04W48/18 H04W72/00 H04W76/02 H04W80/04 H04W84/10 H04W88/06 H04W92/08 (Advanced/Invention)

CPC: H04W28/0284 H04W28/12 H04W28/18 H04L41/0816 H04L41/0893 H04L41/0896 H04L43/0882 H04W72/00 H04W84/10 H04W88/06 H04L41/082 H04L43/10 H04L47/10 H04L47/125 H04L47/20 H04L47/24 **US:** 1/1 709/223

JP F-Term: 5K067 5K067/AA11 5K067/AA21 5K067/AA28 5K067/BB04 5K067/BB21 5K067/DD19 5K067/DD34 5K067/DD57 5K067/EE04 5K067/EE10 5K067/EE16 5K067/EE24 5K067/EE56 5K067/HH22 5K067/JJ12 5K067/JJ13 5K067/JJ39 5K067/JJ73

JP F-Index: H04W16/16 H04W28/02 H04W28/08 H04W28/16 H04W4/00/110 H04W48/18/113 H04W80/04 H04W84/10 H04W92/08/110



Family:

Publication number	Publication date	Application number	Application date
CN107148793 A	20170908	CN201580057963	20150930

DE602015048658 D1	20200326	DE201560048658T	20150930
EP3202089 A1	20170809	EP20150782143	20150930
EP3202089 B1	20200311	EP20150782143	20150930
JP2017535147 T2	20171124	JP20170517039T	20150930
JP6600682 B2	20191030	JP20170517039T	20150930
KR101964245 B1	20190402	KR20177011421	20150930
KR20170063846 A	20170608	KR20177011421	20150930
KR20190035945 A	20190403	KR20197008692	20150930
US2017295103 AA	20171012	US20150514194	20150930
WO16054179 A1	20160407	WO2015US53175	20150930

Priority:

US20140057529P 20140930 EP20150782143 20150930 WO2015US53175 20150930
US20150514194 20150930

Probable Assignee: CONVIDA WIRELESS LLC

Assignee(s): (std): CONVIDA WIRELESS LLC ; CONVIDA WIRELESS LLC

Assignee(s): CONVIDA WIRELESS LLC WILMINGTON

Inventor(s): (std): LI QING ; MOHAMED AHMED ; STARSINIC MICHAEL F ; TOMICI JOHN L ; WANG CHONGGANG

Inventor(s): WANG CHONGGANG PRINCETON ; TOMICI JOHN L SOUTHOLD ; STARSINIC MICHAEL F NEWTOWN ; MOHAMED AHMED PEMBROKE PINES ; LI QING PRINCETON JUNCTION

Agent(s): D YOUNG AND CO LLP; CARPMAELS AND RANSFORD LLP; SAKAI INT PATENT OFFICE; SAMUELS STEVEN B 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 IR 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

4) Family number: 59527121 (US2015173008A)

© PatBase

Title: PROACTIVE PROVISIONING OF POLICIES BY AN ANDSF SERVER

Abstract: Various exemplary embodiments relate to a method, network node, and non-transitory machine-readable storage medium including one or more of the following: identifying, by an ANDSF server, an anticipated location for a user equipment device (UE) in communication with the ANDSF sever via an S14 session established over a first access network; generating, by the ANDSF server, a policy based on the anticipated location for the UE, wherein the policy includes an identification of an access point for use by the UE to access a second access network other than the first access network; and transmitting, by the ANDSF server, the policy including the identification of the access point to the UE via the S14 session over the first access network.

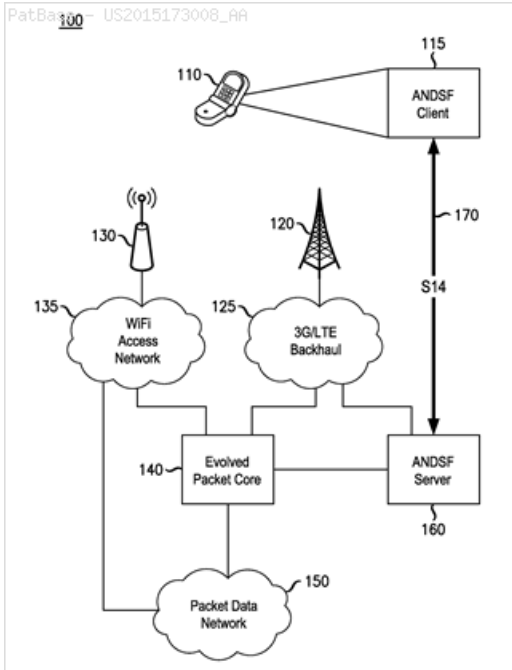
Classifications:

International (IPC 8-9): H04W4/02 H04W48/16

H04W48/18 (Advanced/Invention)

CPC: H04W48/18 H04W48/14 H04W48/16 H04W4/029

US: 455/434



Family:

Publication number	Publication date	Application number	Application date
US2015173008 AA	20150618	US20130105453	20131213

Priority:

US20130105453 20131213

Probable Assignee: ALCATEL LUCENT

Assignee(s): (std): ALCATEL LUCENT USA INC

Assignee(s): CREDIT SUISSE AG ; ALCATEL LUCENT

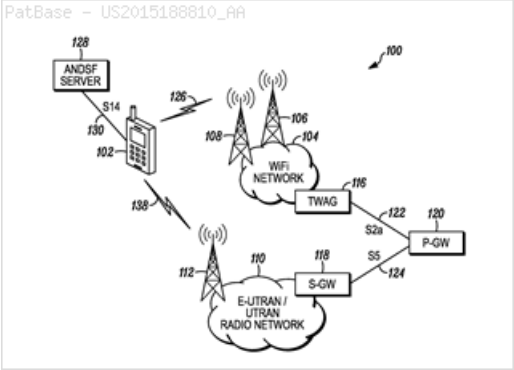
5) Family number: 59630137 (US2015188810A) PatBase

Title: METHOD AND DEVICE FOR POLICY-BASED ROUTING

Abstract: A mobile device performs a method for policy-based routing. The method includes creating a first set of marking rules based on routing policy data provisioned in the mobile device, wherein each marking rule indicates labeling for packets, wherein the labeling is used in selecting one of a plurality of active network interfaces in the mobile device to route the packets over a set of access networks available to the mobile device. The method further includes creating a first set of routing tables corresponding to the labeling indicated by the first set of marking rules, wherein each routing table directs the mobile device to a different one of the active network interfaces of the plurality of active network interfaces.

Classifications:

International (IPC 8-9): H04L12/701 H04L12/721 H04L12/723 H04W40/00 H04W48/18 H04W80/04 H04W88/02 (Advanced/Invention); H04W48/18 H04W88/06 (Advanced/Non-invention) **CPC:** H04W80/04 H04L45/38 H04W40/00 H04W48/18 H04W88/06 **US:** 370/328



Family:

Publication number	Publication date	Application number	Application date
US2015188810 AA	20150702	US20140272614	20140508
US9974115 BB	20180515	US20140272614	20140508
WO15102994 A2	20150709	WO2014US71876	20141222
WO15102994 A3	20150911	WO2014US71876	20141222

Priority:

US20130921566P 20131230 US20140272614 20140508

Probable Assignee: GOOGLE INC

Assignee(s): (std): GOOGLE INC ; GOOGLE TECHNOLOGY HOLDINGS LLC

Assignee(s): MOTOROLA MOBILITY LLC

Inventor(s): (std): SALKINTZIS APOSTOLIS K

Agent(s): FAEGRE BAKER DANIELS LLP; DIETRICK LAURENCE B

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 IR 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 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

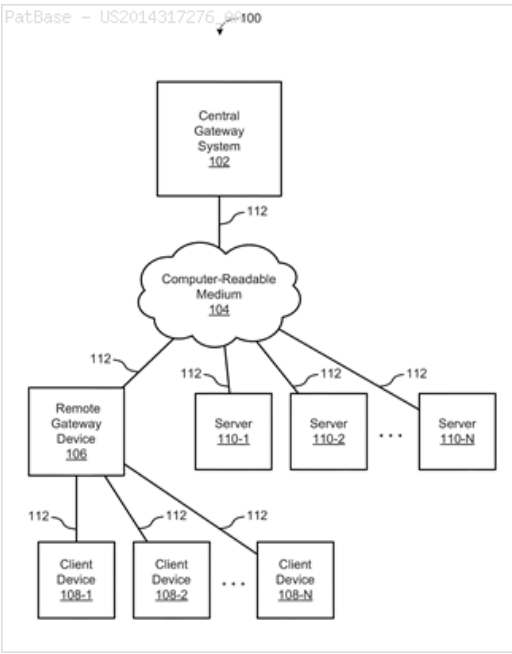
6) Family number: 57613138 (US2014317276A) PatBase

Title: APPLICATION BASED DATA TRAFFIC ROUTING USING NETWORK TUNNELING

Abstract: Various implementations described herein relate to routing network data traffic using network tunnels. In some implementations, one or more tunnels are established between a remote gateway device and a central gateway device central gateway system. The remote gateway device can receive data traffic from one or more client devices and analyzed the data traffic. Based at least in part on the resulting analysis, the remote gateway device identified an application or an application type associated with the data traffic. The remote gateway device can select one or more select tunnels, from the one or more tunnels, based at least in part on the identification of the application or the application type associated with the data traffic. Eventually, the remote gateway device can route the data traffic to the central gateway system using the one or more select tunnels.

Classifications:

International (IPC 8-9): G06F15/173 H04L12/721 H04L12/725 (Advanced/Invention) **CPC:** H04L45/306 **US:** 709/224



Family:

Publication number	Publication date	Application number	Application date
US2014317276 AA	20141023	US20140217132	20140317
US9794169 BB	20171017	US20140217132	20140317

Priority:

US20130802054P 20130315 US20140217132 20140317

Probable Assignee: AEROHIVE NETWORKS INC

Assignee(s): (std): AEROHIVE NETWORKS INC

Assignee(s): BANK OF MONTREAL ; EXTREME NETWORKS INC

Inventor(s): (std): LIU CHANGMING ; TIE JUN

Agent(s): SHEPPARD MULLIN RICHTER AND HAMPTON LLP

7) Family number: 56439146 (US2014136676A) © PatBase

Title: INTER-NETWORK POLICY

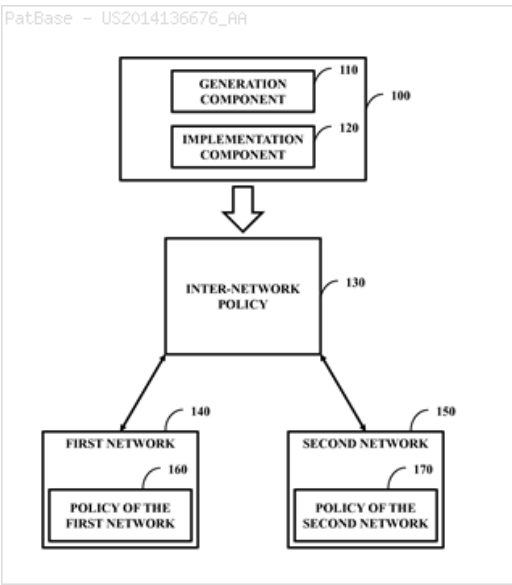
Abstract: Various embodiments associated an inter-network policy that is implemented for use across multiple networks are described. Individual networks can have individual policies that govern how communications are handled, how resources are allocated, and other metrics. When individual networks work together, these networks can experience problems if their individual policies conflict with one another. Therefore, the inter-network policy can be generated that facilitates the individual networks working together.

Classifications:

International (IPC 8-9): G06F15/173 H04L12/24
H04L12/915 (Advanced/Invention)

CPC: H04L41/0893 H04L47/785

US: 709/223



Family:

Publication number	Publication date	Application number	Application date
US2014136676 AA	20140515	US20130078256	20131112
US10181979 BB	20190115	US20130078256	20131112

Priority:

US20120724832P 20121109 US20130078256 20131112

Probable Assignee: US ARMY

Assignee(s): (std): CALIFORNIA INST OF TECHN ; US ARMY ; US NAVY

Assignee(s): CALIFORNIA INST OF TECHNOLOGY ; GOVERNMENT OF UNITED STATES REPRESENTED BY SECRETARY OF ARMY AS ; NASA ; SECRETARY OF NAVY AS US GOV ; SECRETARY OF ARMY AS US GOV

Inventor(s): (std): FRISBIE STEPHEN A ; CHOW EDWARD T ; PALOULIAN GEORGE K ; KALOMIRIS VASILIOS ; VATAN FARROKH

Agent(s): GATES AND COOPER LLP

8) Family number: 55355146 (US8612612B)

© PatBase

Title: DYNAMIC POLICY CONTROL FOR APPLICATION FLOW PROCESSING IN A NETWORK DEVICE

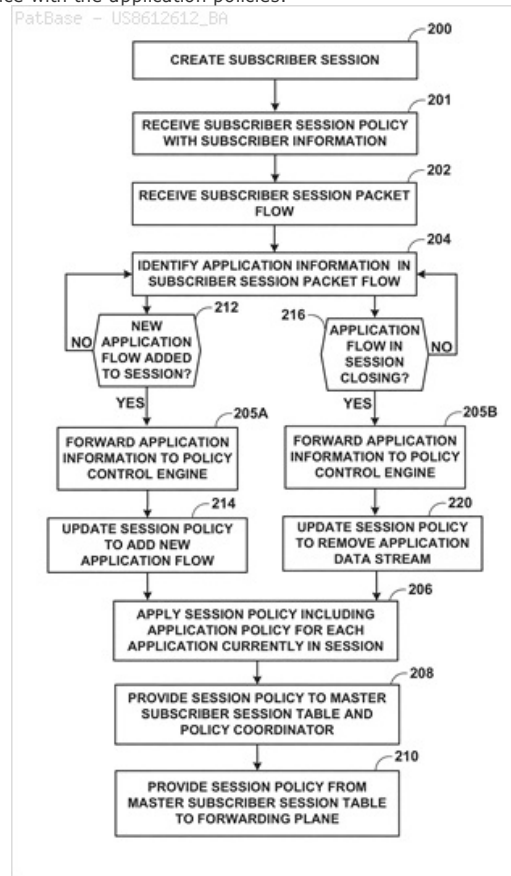
Abstract: In one example, a method includes receiving, with a network device, a portion of a subscriber session packet flow for a subscriber session, and reassembling application-layer data from data packets in the subscriber session packet flow into one or more application flows for the subscriber session. The method includes identifying, from the application flows, application identity information for the application flows, and applying a first session policy to the subscriber session. Applying the first session policy includes applying one or more application policies to the application flows in the subscriber session based on subscriber information and the application identity information for the application flows. The method includes processing the application flows in the subscriber session for accessing a packet data network in accordance with the application policies.

Classifications:

International (IPC 8-9): G06F15/16 H04L29/08 (Advanced/Invention)

CPC: H04L67/14 H04L67/141 H04L47/20 H04L67/32 H04L63/20

US: 370/230 709/203 709/223 709/224 709/228 709/229



Family:

Publication number	Publication date	Application number	Application date
US8612612 BA	20131217	US20110247499	20110928

Priority:

US20110247499 20110928

Probable Assignee: JUNIPER NETWORKS INC

Assignee(s): (std): DUKES MOHINI ; JUNIPER NETWORKS INC ; KAMISSETTY VIJAY ; PANDEY CHANDRA

Inventor(s): (std): DUKES MOHINI ; PANDEY CHANDRA ; KAMISSETTY VIJAY

Agent(s): SHUMAKER AND SIEFFERT PA

Title: METHOD FOR STEERING TRAFFIC IN WIRELESS COMMUNICATIONS SYSTEM AND APPARATUS FOR SUPPORTING SAME

Abstract: Provided is a method for enabling a terminal to handle traffic in a wireless communications system. The method includes the steps of: receiving traffic steering information from a first access network, the traffic steering information containing a first traffic steering rule prescribed by the first access network; evaluating the traffic steering based on at least one of the first traffic steering rule and a second traffic steering rule; and performing the traffic steering between the first access network and a second access network based on the result of the evaluation of the traffic steering.

Classifications:

International (IPC 8-9): H04W24/00 H04W24/10 H04W28/02 H04W36/14

H04W36/22 H04W48/02 H04W48/06 H04W48/08 H04W48/18

H04W88/06 (Advanced/Invention);

H04W36/22 H04W48/02 H04W84/04 H04W84/12

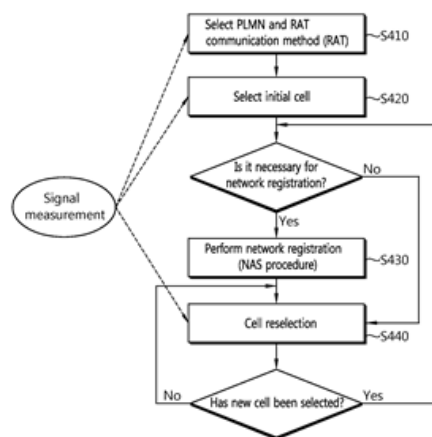
H04W88/06 (Advanced/Non-invention)

CPC: H04W24/10 H04W28/0247 H04W88/06 H04W48/18 H04W48/06

H04W84/12 H04W84/042 H04W48/08 H04W48/02 H04W36/22 H04W36/14

US: 370/331 370/338

PatBase - US2015373603_AA



Family:

Publication number	Publication date	Application number	Application date
DE602014016617 D1	20171214	DE201460016617T	20140203
DE602014026991 D1	20180712	DE201460026991T	20140203
EP2953397 A1	20151209	EP20140746047	20140203
EP2953397 A4	20160824	EP20140746047	20140203
EP2953397 B1	20171101	EP20140746047	20140203
EP2953398 A1	20151209	EP20140746467	20140203
EP2953398 A4	20160824	EP20140746467	20140203
EP2953398 B1	20180613	EP20140746467	20140203
KR20150115749 A	20151014	KR20157020340	20140203
KR20150117257 A	20151019	KR20157020339	20140203
US2015373603 AA	20151224	US20140764893	20140203
US2016007268 AA	20160107	US20140764864	20140203
US9713069 BB	20170718	US20140764864	20140203
WO14119966 A1	20140807	WO2014KR00914	20140203
WO14119968 A1	20140807	WO2014KR00918	20140203

Priority:

US20130758778P 20130131	US20130804216P 20130322	EP20140746047 20140203
EP20140746467 20140203	US20140764864 20140203	US20140764893 20140203
WO2014KR00918 20140203	WO2014KR00914 20140203	

Probable Assignee: LG ELECTRONICS

Assignee(s): (std): LG ELECTRONICS ; LG ELECTRONICS INC

Inventor(s): (std): LEE JAE WOOK ; YI SEUNG JUNE ; LEE YOUNG DAE ; JUNG SUNG HOON ; JUNG SUNGHOON ; YI SEUNGJUNE ; LEE YOUNGDAE ; LEE JAEWOOK

Agent(s): WUESTHOFF AND WUESTHOFF PATENTANWALTE PARTG MBB; CABINET PLASSERAUD; FRENKEL MATTHIAS ALEXANDER; BIRCH STEWART KOLASCH AND BIRCH LLP; S AND IP PATENT AND LAW FIRM

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 IR 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: TERMINAL, NETWORK NODE AND METHODS THEREIN FOR ENABLING ACCESS TO A RADIO COMMUNICATIONS NETWORK

Abstract: Embodiments herein disclose a method in a terminal (10) for enabling access to a radio communications network, wherein the terminal (10) is served in a cell of the radio communications network. The terminal (10) receives an indicator from a base station (12), which indicator indicates a set of settings to use in the cell, and the settings relate to access of the radio communications network.

Classifications:

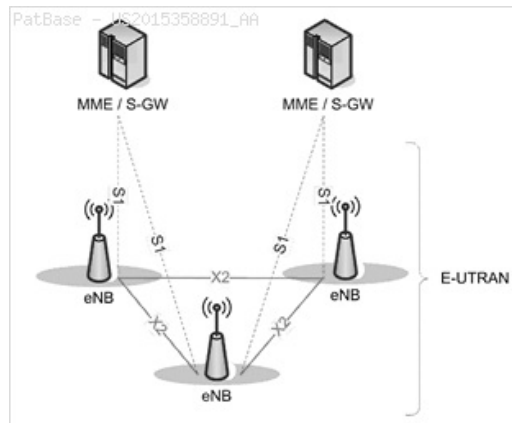
International (IPC 8-9): H04W24/00 H04W48/08 H04W48/18 H04W76/02

H04W76/10 H04W88/02 (Advanced/Invention);

H04W88/02 (Advanced/Non-invention)

CPC: H04W88/02 H04W48/08 H04W48/18 H04W76/10

US: 1/1 370/329



Family:

Publication number	Publication date	Application number	Application date
DE602014037419 D1	20181227	DE201460037419T	20140117
EP2946610 A1	20151125	EP20140740239	20140117
EP2946610 A4	20160810	EP20140740239	20140117
EP2946610 B1	20181205	EP20140740239	20140117
US2015358891 AA	20151210	US20140761330	20140117
US9832709 BB	20171128	US20140761330	20140117
WO14112940 A1	20140724	WO2014SE50054	20140117
WO14112940 A9	20141002	WO2014SE50054	20140117

Priority:

US20130753466P 20130117 EP20140740239 20140117 WO2014SE50054 20140117
US20140761330 20140117

Probable Assignee: TELEFONAKTIEBOLAGET L M ERICSSON PUBL

Assignee(s): (std): ERICSSON TELEFON AB L M ; ERICSSON TELEFON AB L M PUBL ; TELEFONAKTIEBLOAGET L M ERICSSON PUBL ; TELEFONAKTIEBOLAGET L M ERICSSON PUBL ; TELEFONAKTIEBOLAGET LM ERICSSON PUBL

Inventor(s): (std): BERGSTROEM MATTIAS ; TEYEB OUMER ; BERGSTROEM MATTIAS TAN

Agent(s): KUEHN FRIEDRICH HEINRICH; ZACCO SWEDEN AB; MURPHY BILAK AND HOMILLER PLLC; VALEA AB

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 IR 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

11) Family number: 44231272 (US2010008291A)

© PatBase

Title: COGNITIVE WIRELESS SYSTEM

Abstract: A cognitive mobile wireless system is disclosed that enhances connectivity of a mobile device moving among heterogeneous networks, by selecting advantageous links.

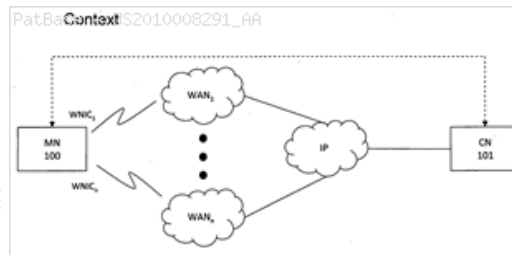
Classifications:

International (IPC 8-9): G06F15/167 H04L12/707 H04L12/721 H04L12/725 H04W36/14 H04W36/24 H04W36/30 H04W36/32 H04W36/36 H04W4/02 H04W4/04 H04W40/02 H04W40/12 H04W40/20 H04W48/14 H04W48/18 H04W72/12 H04W88/06 (Advanced/Invention); H04W36/14 H04W72/12 H04W88/06 (Advanced/Non-invention); H04W36/00 H04W40/02 H04W88/00 (Core/Invention)

CPC: H04W28/26 H04W48/16 H04W16/18 H04W40/18 H04L12/4625 H04L67/02 H04L67/10 H04L67/18 H04W36/32 H04W36/00837 H04W84/12 H04L45/24 H04L45/308 H04L45/70 H04W36/14 H04W40/12 H04W72/1215 H04W88/06 Y02D70/1224 Y02D70/1242 Y02D70/1244 Y02D70/1262 Y02D70/142 Y02D70/144 Y02D70/146 Y02D70/164 Y02D70/23 Y02D70/34 H04W48/14 H04W48/18

European: H04L45/24 H04L45/308 H04L45/70 H04W40/12 T04W72/12B3 T04W88/06

US: 1/1 370/252 370/328 370/328P 370/331 370/338 709/223 709/224 714/748



Family:

Publication number	Publication date	Application number	Application date
CA2730269 AA	20110107	CA20092730269	20090708
CA2730269 C	20180417	CA20092730269	20090708
EP2304989 A2	20110406	EP20090794088	20090708
EP2304989 A4	20140709	EP20090794088	20090708
EP2304989 B1	20170426	EP20090794088	20090708
US2010008291 AA	20100114	US20080289165	20081022
US2013308482 AA	20131121	US20130944771	20130717
US2017078956 AA	20170316	US20150923418	20151026
US8516096 BB	20130820	US20080289165	20081022
US9173160 BB	20151027	US20130944771	20130717

WO10004510 A2	20100114	WO2009IB52958	20090708
WO10004510 A3	20100225	WO2009IB52958	20090708
WO17070776 A1	20170504	WO2016CA51236	20161026

Priority:

US20080129638P 20080709 US20080289165 20081022 WO2009IB52958 20090708
US20130944771 20130717 US20150923418 20151026

Probable Assignee: SIERRA WIRELESS INC

Assignee(s): (std): IN MOTION TECH INC ; IN MOTION TECHNOLOGY INC ; LEBLANC LAWRENCE JOSEPH ; MOIR KIRK ARNOLD ; SIERRA WIRELESS INC ; HO EDDIE SHEK CHEUNG

Assignee(s): HO EDDIE SHEK CHEUNG350 - 325 AGNES STREETNEW WESTMINSTERB1V3M 5Y4CA ; SIERRA WIRELESS INC13811 WIRELESS WAYRICHMONDB1V6V 3A4CA ; MOIR KIRK ARNOLD350 - 625 AGNES STREETNEW WESTMINSTERB1V3M 5Y4CA ; LEBLANC LAWRENCE JOSEPH350 - 625 AGNES STREETNEW WESTMINSTERB1V3M 5Y4CA ; IN MOTION TECHNOLOGY INC350 - 625 AGNES STREETNEW WESTMINSTERB1V3M 5Y4CA

Inventor(s): (std): LEBLANC LAWRENCE JOSEPH ; HO EDDIE SHEK CHEUNG ; MOIR KIRK ARNOLD

Inventor(s): HO EDDIE SHEK CHEUNG350 - 325 AGNES STREETNEW WESTMINSTERB1V3M 5Y4CA ; MOIR KIRK ARNOLD350 - 625 AGNES STREETNEW WESTMINSTERB1V3M 5Y4CA ; LEBLANC LAWRENCE JOSEPH350 - 625 AGNES STREETNEW WESTMINSTERB1V3M 5Y4CA

Agent(s): YANG MARK MING JEN; MBM INTELLECTUAL PROPERTY LAW LLP; SCHMIDT SVEN HENDRIK; DR WEITZEL AND PARTNER; EDDIE HO C O IN MOTION TECHNOLOGY INC

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 DJ 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 IR IS IT JP KE KG KM KN KP KR KW 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

12) Family number: 56491287 (US2014140211A)

© PatBase

Title: CLASSIFICATION OF TRAFFIC FOR APPLICATION AWARE POLICIES IN A WIRELESS NETWORK

Abstract: In one embodiment, a method includes performing stateful application classification on packets received at a controller and transmitting classification information to an access point. The classification information includes flow information and stateless rules for applying policies. The access point is configured to use the classification information to perform stateless application classification and apply policies to packets received from a mobile device. An apparatus and logic are also disclosed herein.

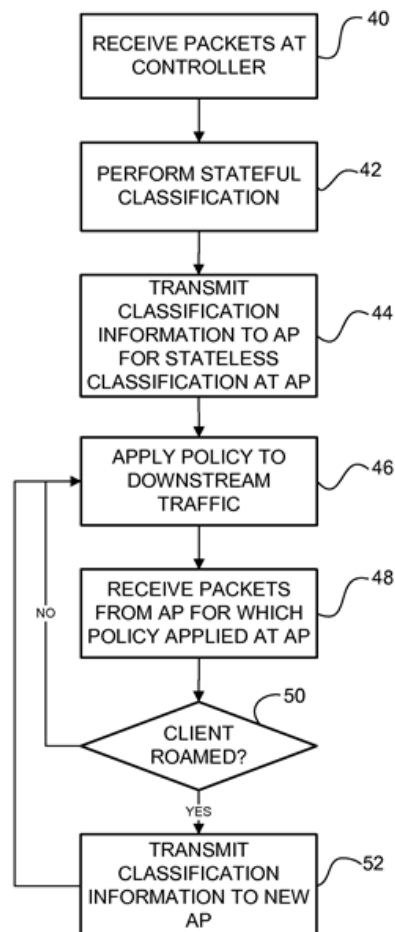
Classifications:

International (IPC 8-9): H04W28/02 (Advanced/Invention)

CPC: H04W28/0268 H04L47/2441

US: 370/235

PatBase - US2014140211_A1



Family:

Publication number	Publication date	Application number	Application date
US2014140211 AA	20140522	US20120679923	20121116

Priority:

US20120679923 20121116

Probable Assignee: CISCO SYSTEMS INC

Assignee(s): (std): CISCO TECH INC

Assignee(s): CISCO TECHNOLOGY INC ; CISCO SYSTEMS INC

Inventor(s): (std): NALAMALAPU KASI ; NAYAK SEEMA ; CHANDRASEKARAN BALACHANDER

13) Family number: 51334348 (US2012158949A)

© PatBase

Title: NETWORK SYSTEM FOR POLICING RESOURCE INTENSIVE BEHAVIORS

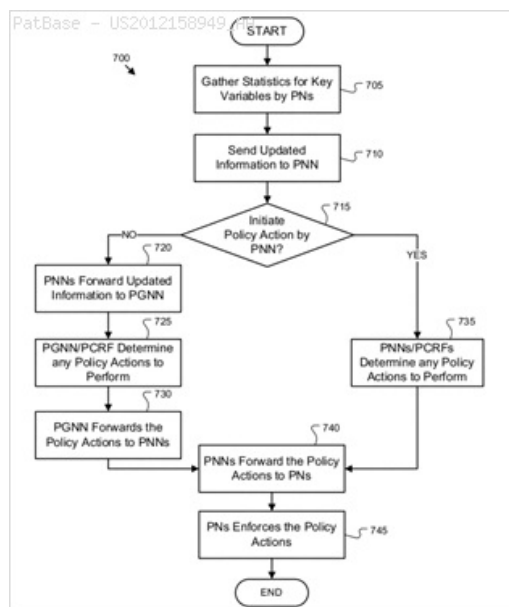
Abstract: A system may include a network traffic policing system configured to monitor resource intensive users and applications of a wireless communication network. The network traffic policing system may include a processing device configured to determine policy actions; and a plurality of policy nodes in communication with the processing device and configured to: gather statistics regarding key variables of the wireless communication network, the statistics including at least one non-data usage variable, forward updated information relating to the key variables to the processing device, and enforce at least one policy action determined by the processing device.

Classifications:

International (IPC 8-9): G06F15/16 G06F15/173 (Advanced/Invention)

CPC: H04L41/0896 H04L41/0893

US: 370/241 709/203 709/224 709/224P 709/228



Family:

Publication number	Publication date	Application number	Application date
US2012158949 AA	20120621	US20100974364	20101221
US8495207 BB	20130723	US20100974364	20101221

Priority:

US20100974364 20101221

Probable Assignee: VERIZON PATENT AND LICENSING INC

Assignee(s): (std): LEE JAY J ; VERIZON PATENT AND LICENSING INC

Inventor(s): (std): LEE JAY J

14) Family number: 11582480 (US6985454B)

© PatBase

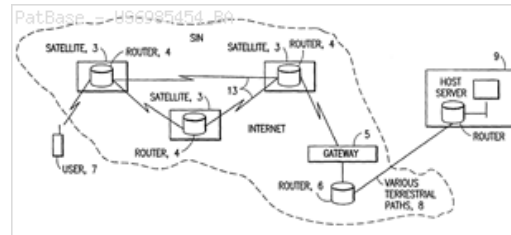
Title: ISP SYSTEM USING NON-GEOSYNCHRONOUS ORBIT SATELLITES

Abstract: A satellite communication system includes a plurality of satellites, such as low earth orbit satellites, and a plurality of gateways. The satellite communication system is bidirectionally coupled to a terrestrial communication system through at least the plurality of gateways. The satellite communication system and the terrestrial communications system together form a data communication network having a plurality of nodes including source nodes, destination nodes and intermediate nodes. Multiple copies of a packet can coexist within the data communication network, and the packet and its one or more copies are routed, using at least in part satellite-resident routers and gateway-resident routers, over a plurality of different paths between a particular source node and a particular destination node. At least one duplicate copy of a given packet is simply not used during the execution of a packet reordering procedure in the destination node, or at an intermediate node. Certain of the paths are carried over satellite-to-satellite cross-links, while certain other ones of the paths are carried over satellite-to-gateway uplinks and downlinks, and at least one path exists between a user terminal and at least one satellite. In a preferred embodiment the packets are TCP/IP (or equivalent protocol) packets containing information for enabling the selective destruction of a duplicate packet to occur.

Classifications:

International (IPC 8-9): H04B7/185 H04B7/195 H04L12/56 H04L12/66

H04M9/00 H04Q3/60 H04Q7/38 (Advanced/Invention);
H04B7/195 H04L12/56 H04M9/00 H04Q7/38 (Advanced/Non-invention);
H04B7/185 H04B7/195 H04M12/56 H04L12/66 H04M9/00 H04Q3/60
H04Q7/38 (Core/Invention)
International (IPC 1-7): H04B7/185 H04B7/195 H04L12/28 H04L12/46
H04L12/56 H04L12/66 H04M9/00 H04Q3/60 H04Q7/38
CPC: H04B7/18589
European: H04B7/185S12
US: 370/316 370/390 370/394 370/401
JP F-Term: 5K030 5K030/GA04 5K030/HA08 5K030/HB01 5K030/HC01
5K030/HD03 5K030/HD06 5K030/HD09 5K030/JA11 5K030/JL02
5K030/LB05 5K030/LB11 5K030/LC18 5K030/LD02 5K033 5K033/AA01
5K033/BA14 5K033/CB08 5K033/CB13 5K033/CC02 5K033/DA05 5K033/DA18 5K033/DB18 5K038 5K038/CC06 5K038/DD00
5K038/EE05 5K038/FF00 5K067 5K067/BB21 5K067/CC08 5K067/EE07 5K067/HH07 5K067/HH11 5K067/JJ35 5K067/JJ39 5K072
5K072/BB24 5K072/CC04 5K072/DD03 5K072/DD04 5K072/EE04 5K072/FF27
JP F-Index: H04B7/185 H04B7/195 H04B7/26/109/N H04L11/00/310/C H04L11/20/102/D H04L12/46/Z H04L12/56/100/Z
H04L12/803 H04M9/00/Z H04Q7/00/341 H04Q7/00/626 H04W40/02 H04W84/06



Family:

Publication number	Publication date	Application number	Application date
AU199961805 A1	20000727	AU19990061805	19991201
AU199961805 A5	20000727	AU19990061805	19991201
AU759936 B2	20030501	AU19990061805	19991201
CA2296202 AA	20000726	CA20002296202	20000117
EP1024610 A2	20000802	EP20000300535	20000125
EP1024610 A3	20011024	EP20000300535	20000125
JP2000224237 A2	20000811	JP20000017373	20000126
RU2000102103 A	20011127	RU20000102103	20000125
US6985454 BA	20060110	US19990334386	19990616

Priority:

US19990117284P 19990126 US19990177284P 19990126 US19990334386 19990616
CA20002296202 20000117

Probable Assignee: GLOBALSTAR INC

Assignee(s): (std): GLOBALSTAR LP

Assignee(s): WAKNIS PRASHANT V ; WIEDEMAN ROBERT A ; WACHOVIA INVESTMENT HOLDINGS LLC ; THERMO FUNDING CO ; THERMO FUNDING CO LLC ; BNP PARIBAS ; GLOBALSTAR INC ; GLOBALSTAR L P ; GLOBALSTAR LLC

Inventor(s): (std): WIEDEMAN ROBERT A ; WAKNIS PRASHANT V

Inventor(s): PRASHANT V WAKNIS ; ROBERT A WIEDEMAN

Agent(s): COLLISON AND CO; SIM AND MCBURNEY; KARAMBELAS AND ASSOCIATES

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

15) Family number: 56957551 (US2015319662A)

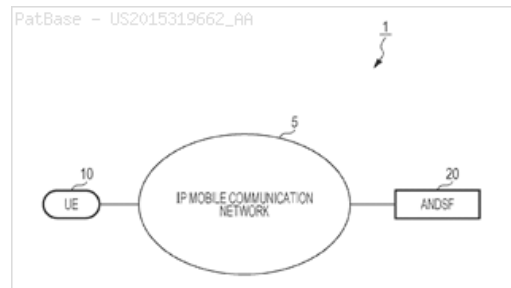
© PatBase

Title: MOBILE COMMUNICATION SYSTEM AND UE

Abstract: A policy management device transmits an update of a mobile operator policy that requests to switch an access system for each flow that UE is going to perform communication. In addition, the policy management device requests to enable a network interface that is to be used for performing communication by making a connection to the switched access system. The UE compares the received update of the mobile operator policy with a UE policy that is held in advance and determines which is to be preferentially used. In a case where the UE determines to preferentially use the mobile operator policy, the UE switches the access system to offload communication.

Classifications:

International (IPC 8-9): H04L12/24 H04W24/04 H04W28/08 H04W36/14
H04W36/22 H04W48/18 H04W88/06 H04W88/16 (Advanced/Invention)
CPC: H04W48/18 H04W88/16 H04W24/04 H04L41/5045 H04W36/14
H04W36/22 H04W88/06
US: 370/338
JP F-Term: 5K067 5K067/AA21 5K067/DD11 5K067/EE04 5K067/EE10
5K067/EE16 5K067/JJ35
JP F-Index: H04W28/08 H04W36/14 H04W36/22



Family:

Publication number	Publication date	Application number	Application date
JP2014112638 A1	20170119	JP20140557537T	20140121
US2015319662 AA	20151105	US20140762045	20140121
WO14112638 A1	20140724	WO2014JP51072	20140121

Priority:

JP20130008183 20130121 WO2014JP51072 20140121

Probable Assignee: SHARP KK

Assignee(s): (std): SHARP KK

Inventor(s): (std): ENOMOTO MASAYUKI ; ARAMOTO MASAFUMI

Agent(s): MIYAO AKISHIGE; KANDA MASAYOSHI; FUJIMOTO EISUKE; FUNAYAMA TAKESHI 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 IR 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 PA PE PG PH PL PT QA QZ RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: SYSTEM AND METHOD TO ASSURE NETWORK SERVICE LEVELS WITH INTELLIGENT ROUTING

Abstract: A method and system for maintaining a traffic service level for data communicated by a computer network having a source. The computer network is connected to at least one of many networks, where each of the many networks includes a number of paths for transporting the data communicated to a destination. In one embodiment of the method, the traffic service level associated with one of the paths between the source and the destination is monitored. Then, it is determined whether the traffic service level associated with that path meets one or more performance metrics. If a flow of data communicated over the monitored path fails to meet at least one of the performance metrics, then a service level violation is indicated. Upon such an indication, an alternate path is selected to resolve the service level violation.

Classifications:

International (IPC 8-9): H04L H04L12/24 H04L12/26

H04L12/56 (Advanced/Invention);

H04L12/24 H04L12/26 H04L12/56 (Core/Invention)

International (IPC 1-7): H04L12/26 H04L12/28 H04L12/56

CPC: H04L47/70 H04L47/24 H04L41/0816 H04L41/083 H04L41/5003

H04L41/5009 H04L41/5025 H04L41/5087 H04L41/509 H04L45/124

H04L45/22 H04L47/10 H04L47/15 H04L47/2425 H04L47/762 H04L47/781

H04L47/783 H04L47/801 H04L47/803 H04L47/822

European: H04L12/24E1B1 H04L12/24E1B3B H04L12/24S1B

H04L12/56C1 H04L12/56R H04L41/08A2A H04L41/08A3B H04L41/50A2

H04L45/124 H04L45/22 H04L47/10 H04L47/15 H04L47/24 H04L47/24C

H04L47/76A H04L47/78A H04L47/78C H04L47/80A H04L47/80B

H04L47/82B T04L12/24S1 T04L12/24S1B T04L12/24S1C2 T04L12/24S6E

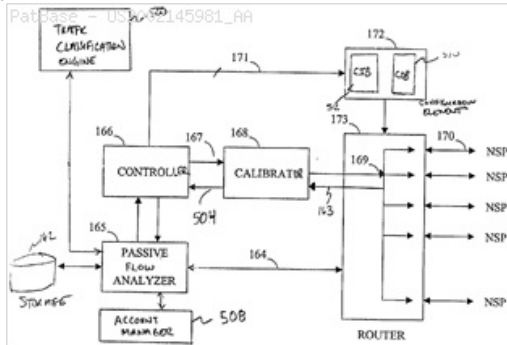
T04L12/24S6C T04L41/50A T04L41/50A2 T04L41/50B2 T04L41/50M2

T04L41/50M3

US: 370/228 370/238 370/244 370/244P 370/351 370/351S

JP F-Term: 5K030 5K030/HD03 5K030/JA10 5K030/LB08 5K030/MA04 5

JP F-Index: H04L12/56/100/Z H04L12/56/400/B H04L12/70/100/Z H04L12/70/400/B



Family:

Publication number	Publication date	Application number	Application date
EP1386449 A1	20040204	EP20020719487	20020410
EP1386449 A4	20051005	EP20020719487	20020410
HK1065420 A1	20050218	HK20040105795	20040804
HK1065420 A3	20050218	HK20040105795	20040804
JP2004528775 T2	20040916	JP20020582558T	20020410
JP4122232 B2	20080723	JP20020582558T	20020410
US2002145981 AA	20021010	US20010833219	20010410
US7269157 BB	20070911	US20010833219	20010410
WO20084951 A1	20021024	WO2002US11357	20020410

Priority:

US20010833219 20010410 WO2002US11357 20020410

Probable Assignee: INTERNAP CORP

Assignee(s): (std): INTERNAP NETWORK SERVICES CORP ; SEQUIERA ALLWYN ; NETVMG INC

Assignee(s): JOHNSON JEREMY ; KLINKER ERIC ; JEFFERIES FINANCE LLC AS COLLATERAL AGENT ; JEFFERIES FINANCE LLC ; NETVMG INC 1020 RINCON CIRCLE SAN JOSE CA 95131 UNITED STATES UNITED ; WELLS FARGO CAPITAL FINANCE LLC AGENT AS ; COMDISCO INC ; INTERNAP CORP

Inventor(s): (std): KLINKER ERIC ; JOHNSON JEREMY ; SEQUIERA ALLWYN

Inventor(s): ERIC KLINKER ; ALLWYN SEQUIERA ; JEREMY JOHNSON

Agent(s): WILLIAMS DAVIS HILL AND CO SUITE 701 7TH FLOOR 6 8 POTTINGER STREET CENTRAL; KILPATRICK STOCKTON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM
DZ EC EE 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 NE NL NO NZ OM PH PL PT RO RU SD SE SG SI
SK SL SN SZ TD TG TI TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Title: RURAL BROADBAND HYBRID SATELLITE/TERRESTRIAL SOLUTION

Abstract: At a remote site, a satellite route is installed to augment the capacity of a terrestrial route. A specialized forwarding unit is introduced at both ends of these parallel satellite and terrestrial routes. The forwarding unit identifies what type of traffic needs a higher performance forward, and forwards the traffic accordingly. For example, latency-sensitive traffic can be forwarded over the terrestrial route and the latency insensitive traffic can be forwarded over the satellite route.

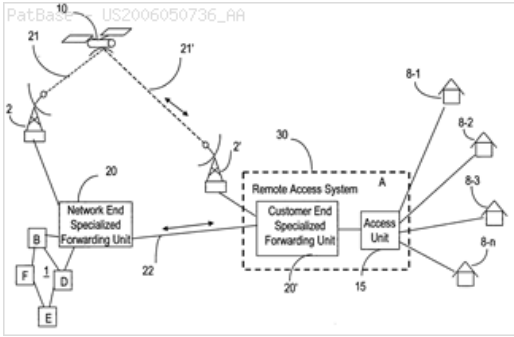
Classifications:

International (IPC 8-9): H04B7/155 H04B7/185 H04J3/14 H04L12/56

H04N7/20 (Advanced/Invention);

H04B7/155 H04J3/14 H04L12/56 H04N7/20 (Core/Invention)

CPC: H04B7/18591



Family:

Publication number	Publication date	Application number	Application date
AT541365 E	20120115	AT20050300727T	20050908
CN1747353 A	20060315	CN200510102533	20050908
CN1747353 B	20130410	CN200510102533	20050908
DE602005032083 D1	20120315	DE200560032083T	20050908
EP1635482 A2	20060315	EP20050300727	20050908
EP1635482 A3	20080206	EP20050300727	20050908
EP1635482 B1	20120111	EP20050300727	20050908
US2006050736 AA	20060309	US20040935457	20040908
US7477597 BB	20090113	US20040935457	20040908

Priority:

US20040935457 20040908 EP20050300727 20050908

Probable Assignee: ALCATEL LUCENT

Assignee(s): (std): ALCATEL LUCENT ; CIT ALCATEL

Assignee(s): CREDIT SUISSE AG ; ALCATEL

Inventor(s): (std): SEGEL JONATHAN D ; DEAN SEGEL JONATHAN ; SEGEL JONATHAN DEAN

Inventor(s): SEGEL JONATHAN DEAN OTTAWA ; SEGEL JONATHAN

Agent(s): KNECHT MENZIETTI WETZEL; HERVOUET SYLVIE ET AL; NICOLLE OLIVIER; KRAMER AND AMADO PC

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR YU

18) Family number: 56343629 (US2014123211A)

© PatBase

Title: SYSTEM AND METHOD FOR SECURING VIRTUALIZED NETWORKS

Abstract: A method and apparatus that secures a dynamic virtualized network is described. In an exemplary embodiment, a device learns a current network policy of the dynamic virtualized network, where the dynamic virtualized network is a virtualized layer 2 network that is overlaid on a layer 3 physical network. In addition, the current network policy includes multiple network policy elements, where each of the multiple network policy elements identifies an authorized endpoint in the dynamic virtualized network. Furthermore, the layer 3 physical network includes multiple network access devices. The device further determines a network security policy for the dynamic virtualized network from the current network policy. The network security policy includes one or more second network policy elements that are a different network policy element than one of the multiple network policy elements of the current network policy. In addition, each of the one or more second network policy network elements adds an additional policy on how network traffic is processed in the dynamic virtualized network by a port of one of the plurality of network access devices. The device further applies the network security policy to each network access device that is affected by the network security policy.

Classifications:

International (IPC 8-9): G06F11/30 G06F17/00 G06F21/50 H04L12/18

H04L12/24 H04L12/26 H04L12/46 H04L12/905 H04L29/06 H04L29/08

H04L9/00 (Advanced/Invention);

H04L29/06 (Advanced/Non-invention)

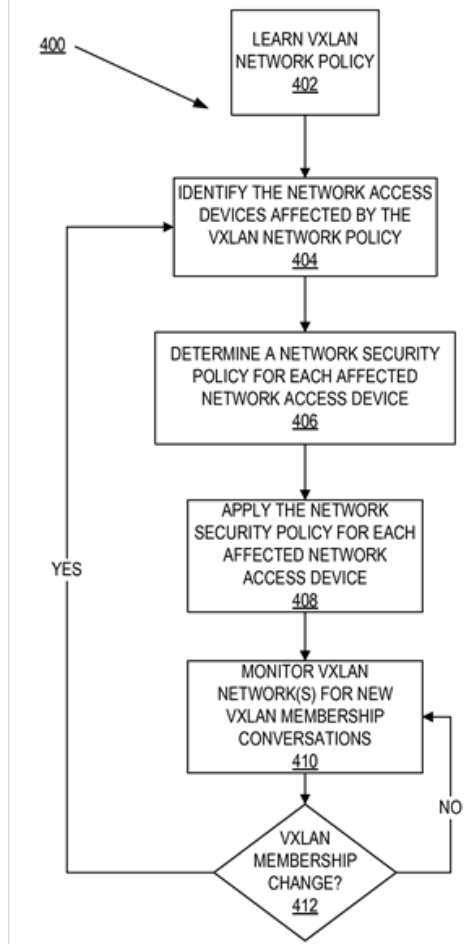
CPC: H04L63/10 H04L63/101 H04L12/4641 H04L41/20 H04L63/20

H04L67/143 H04L67/146 H04L12/18 H04L63/0263 H04L43/50

US: 1/1 370/213 370/231 370/252 370/254 709/223 709/224 713/151

713/153 726/1 726/1 726/13 726/13 726/14 726/14 726/15 726/15 726/3

726/3

**Family:**

Publication number	Publication date	Application number	Application date
EP2915090 A1	20150909	EP20130850972	20131029
EP2915090 A4	20160706	EP20130850972	20131029
US2014123211 AA	20140501	US20130842695	20130315
US2014123212 AA	20140501	US20130911925	20130606
US2015089583 AA	20150326	US20140555441	20141126
US2017180323 AA	20170622	US20170452436	20170307
US2017195207 AA	20170706	US20170465577	20170321
US8931046 BB	20150106	US20130842695	20130315
US8931047 BB	20150106	US20130911925	20130606
US9609021 BB	20170328	US20140555441	20141126
US9887901 BB	20180206	US20170465577	20170321
US9948607 BB	20180417	US20170452436	20170307
WO14070773 A1	20140508	WO2013US67312	20131029

Priority:

US20120720343P	20121030	US20130842695	20130315	US20130911925	20130606
WO2013US67312	20131029	US20140555441	20141126	US20170452436	20170307
US20170465577	20170321				

Probable Assignee: STATELESS NETWORKS INC**Assignee(s):** (std): ANTONOPOULOS ANDREAS MARKOS ; FORTINET INC ; WANSER KELLY ; STATELESS NETWORKS INC**Assignee(s):** LUMINUS NETWORKS INC ; EXIGENT LEASING PARTNERSHIP LTD**Inventor(s):** (std): WANSER KELLY ; ANTONOPOULOS ANDREAS MARKOS ; ANTONOPOULOS ANDREAS MARKSO**Agent(s):** BARTON RUSSELL GLEN; BLAKELY SOKOLOFF TAYLOR AND ZAFMAN LLP; HAMILTON DESANCTIS AND CHA LLP; REPLOGLE ERIC S 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 IR 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: TRAFFIC OFFLOAD IN COMMUNICATION NETWORKS

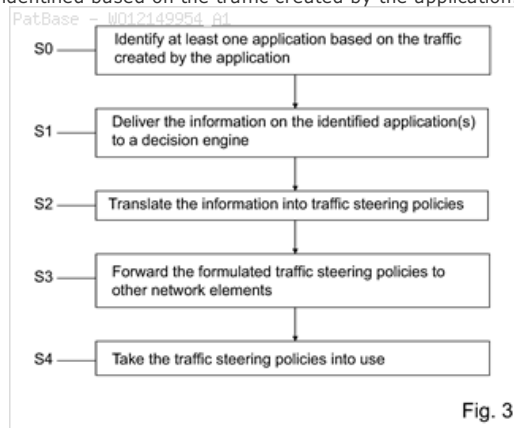
Abstract: A method, apparatuses and a computer-readable medium are provided for traffic steering in a communication network, the method comprising receiving at a first network element a traffic steering instruction from a second network element and activating the traffic steering instruction, wherein the traffic steering instruction is created by the second network element based on at least one identified application and wherein the application is identified based on the traffic created by the application.

Classifications:

International (IPC 8-9): H04W40/28 (Advanced/Invention)

CPC: H04W40/28 H04W36/14 H04W36/22 H04W36/385

European: H04W36/22 H04W40/28 T04W36/14 T04W36/38N

**Family:**

Publication number	Publication date	Application number	Application date
WO12149954 A1	20121108	WO2011EP56987	20110503

Priority:

WO2011EP56987 20110503

Probable Assignee: NOKIA SIEMENS NETWORKS OY

Assignee(s): (std): NOKIA SIEMENS NETWORKS OY ; TERVONEN JANNE PETTERI

Inventor(s): (std): TERVONEN JANNE PETTERI

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 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 STEERING OF TRAFFIC ACROSS RADIO ACCESS NETWORKS

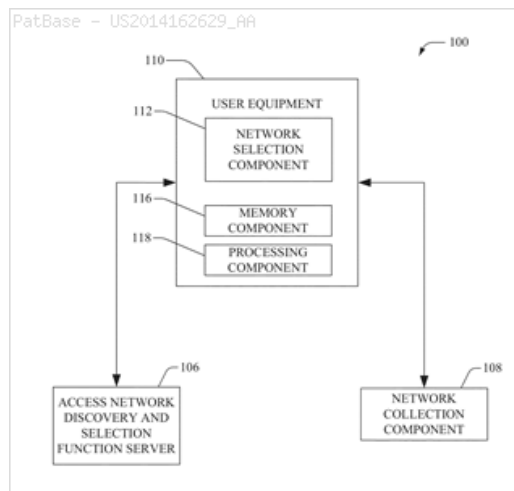
Abstract: Intelligent radio access technology sensing and selection are applied in a dynamic traffic steering network. Network characteristics and network policies are determined. A server sends network characteristics and network policies to user equipment devices. User equipment devices can determine a radio access technology to connect to based on network policies and network characteristics. Further, it can be determined how to select user equipment devices for connection to a radio access network via a radio access technology. In one aspect, user equipment devices dynamically select a radio access network for connection based on real-time or near real-time radio access network conditions. In another aspect, a self-organizing network can monitor and determine radio access network conditions and the radio access network conditions can be sent to user equipment devices in given cellular broadcast area.

Classifications:

International (IPC 8-9): G06F15/16 H04L12/24 H04L12/54 H04W24/02 H04W28/02 H04W28/08 H04W36/00 H04W36/14 H04W36/22 H04W36/24 H04W36/26 H04W36/30 (Advanced/Invention)

CPC: H04W36/26 H04W36/245 H04W36/30 H04L12/5692 H04L41/0816 H04L41/0893 H04W24/02 H04W28/08 H04W36/14 H04W36/22

US: 1/1 370/229 370/331 455/423 455/440

**Family:**

Publication number	Publication date	Application number	Application date
US2014162629 AA	20140612	US20120709284	20121210
US2014376365 AA	20141225	US20140477814	20140904

US2017118687 AA	20170427	US20170396996	20170103
US2018124665 AA	20180503	US20170846974	20171219
US2019246327 AA	20190808	US20190390109	20190422
US8855625 BB	20141007	US20120709284	20121210
US9560568 BB	20170131	US20140477814	20140904
US9860812 BB	20180102	US20170396996	20170103
US10313943 BB	20190604	US20170846974	20171219

Priority:

US20120709284 20121210 US20140477814 20140904 US20170396996 20170103
US20170846974 20171219 US20190390109 20190422

Probable Assignee: AT AND T MOBILITY II LLC

Assignee(s): (std): AT AND T IP I LP ; AT AND T MOBILITY II LLC

Assignee(s): AT AND T INTELLECTUAL PROPERTY I L P ; AT AND T INTELLECTUAL PROPERTY I LP

Inventor(s): (std): TIPTON RICK ; OHANA ALAIN ; AUSTIN MARK ; CUI ZHI

Agent(s): AMIN TUROCY AND WATSON LLP

21) Family number: 77268755 (WO14130091A1)

© PatBase

Title: SYSTEMS AND METHODS FOR ACCESS NETWORK SELECTION AND TRAFFIC ROUTING

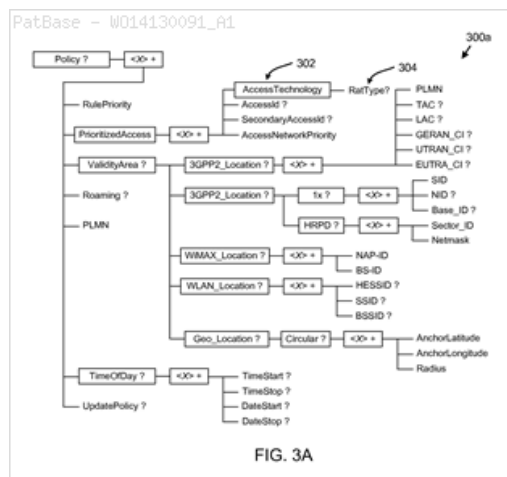
Abstract: Methods, systems, and devices for network selection and traffic routing are disclosed herein. User equipment (UE) is configured to store an access network selection and detection function (ANDSF) management object (MO). The ANDSF MO may include network selection rules indicating relative priority based on a specific radio access technology (RAT) types of different access networks. The UE is configured to identify one or more available access networks. The UE is configured to establish a connection with an access network of the one or more available access networks. The UE establishes the connection with an access network having a RAT with a highest relative priority of the one or more available access networks based on the network selection rules.

Classifications:

International (IPC 8-9): H04B7/24 H04L H04L12/701 H04L5/00 H04W H04W24/00 H04W28/02 H04W28/08 H04W36/08 H04W36/30 H04W4/00 H04W4/08 H04W40/02 H04W48/08 H04W48/16 H04W48/18 H04W52/02 H04W72/02 H04W72/04 H04W8/00 H04W80/10 H04W88/02 H04W88/06 H04W88/08 (Advanced/Invention);

H04L12/725 H04W28/08 H04W88/06 (Advanced/Non-invention)

CPC: H04L45/30 H04L47/11 H04L47/12 H04W4/70 H04W8/005 H04W28/0289 H04W28/08 H04W28/12 H04W40/02 H04W48/14 H04W48/18 H04W52/0216 H04W52/028 H04W88/06 Y02D70/00 H04L61/2514 H04L61/2525 H04L61/2564 H04L61/2575 H04L61/2592 H04L61/6077 H04W72/02 H04W72/042 H04W4/80 H04W76/14 H04W76/23 Y02D70/1224 Y02D70/1226 Y02D70/1242 Y02D70/1262 Y02D70/1264 Y02D70/142 Y02D70/144 Y02D70/146 Y02D70/166 Y02D70/21 Y02D70/22 Y02D70/23 H04L12/4633 H04L27/2614 H04L61/2539 H04W24/02 H04W24/06 H04W28/02 H04W36/0088 H04W36/30 H04W40/244 H04W48/08 H04W48/16 H04W72/005 H04W72/0413 H04W72/0446 H04W74/002 H04W74/02 H04W74/04 H04W74/08 H04W76/27 H04W76/28 H04W84/12 Y02D70/1222 H04L5/0007



Family:

Publication number	Publication date	Application number	Application date
CN104938003 A	20150923	CN201380070578	20131220
CN104938003 B	20200211	CN201380070578	20131220
EP2959734 A1	20151230	EP20130875361	20131220
EP2959734 A4	20161214	EP20130875361	20131220
EP2959734 B1	20180131	EP20130875361	20131220
ES2751880 T3	20200402	ES20170200772T	20131226
HK1242890 A1	20180629	HK20180101917	20180207
HU036794 T2	20180730	HU20130875361T	20131220
HU036988 T2	20180828	HU20130875795T	20131226
HU039322 T2	20181228	HU20130876030T	20130927
HU045259 T2	20191230	HU20170200772T	20131226
KR101716845 B1	20170315	KR20157019868	20131220
KR20150098668 A	20150828	KR20157019868	20131220
KR20170032479 A	20170322	KR20177006484	20131220
WO14130091 A1	20140828	WO2013US61897	20130926
WO14130092 A1	20140828	WO2013US62183	20130927
WO14130093 A1	20140828	WO2013US62228	20130927
WO14130094 A1	20140828	WO2013US62384	20130927
WO14130143 A1	20140828	WO2013US74867	20131213
WO14130144 A2	20140828	WO2013US74871	20131213
WO14130144 A3	20150108	WO2013US74871	20131213
WO14130153 A1	20140828	WO2013US77120	20131220
WO14130154 A1	20140828	WO2013US77129	20131220
WO14130156 A1	20140828	WO2013US77753	20131226
WO14130157 A1	20140828	WO2013US77754	20131226

US20130768330P 20130222 WO2013US77129 20131220

Assignee(s): (std): INTEL IP CORP ; ZONG PINGPING ; ZHU YUAN ; YIU CANDY ; YIN HUJUN ; XIONG GANG ; WAGNER ELMAR ; VENKATACHALAM MUTHAIAH ; STOJANOVSKI ALEXANDRE S ; SIOW ERIC ; SHAN CHANG HONG ; PANTELEEV SERGEY ; NIU HUANING ; LUFT ACHIM ; LI QINGHUA ; KHORYAEV ALEXEY ; JOHNSON KERSTIN ; JAIN PUNEET K ; HAN SEUNGHEE ; GUPTA VIVEK ; FAN LIN ; ETEMAD KAMRAN ; DAVYDOV ALEXEI ; CHATTERJEE DEBDEEP ; INTEL CORP

Inventor(s): (std): CHATTERJEE DEBDEEP ; DAVYDOV ALEXEI ; FAN LIN ; GUPTA VIVEK ; HAN SEUNGHEE ; JAIN PUNEET K ; KHORYAEV ALEXEY ; NIU HUANG ; PANTELEEV SERGEY ; SHAN CHANG HONG ; SIOW ERIC ; STOJANOVSKI ALEXANDRE S ; VENKATACHALAM MUTHAIAH ; WAGNER ELMAR ; XIONG GANG ; ZHU YUAN ; ZONG PINGPING ; YIU CANDY ; YIN HUJUN ; LUFT ACHIM ; LI QINGHUA ; JOHNSON KERSTIN ; ETEMAD KAMRAN

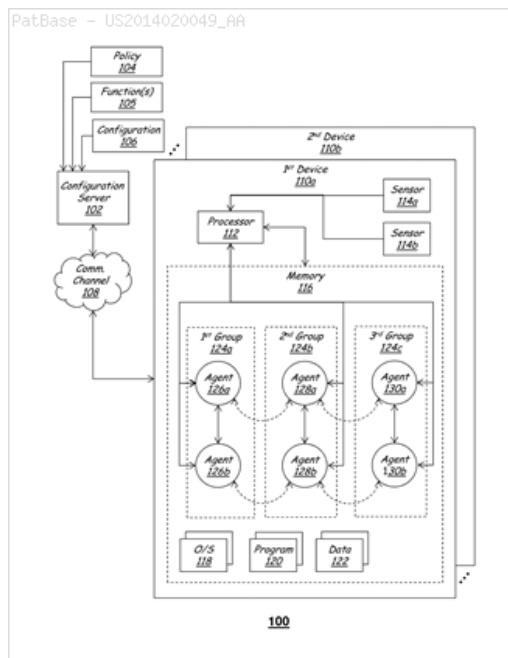
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RA RO RS 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

Abstract: A system that incorporates teachings of the subject disclosure may include, for example, receiving multiple software agents and configuring a network of the multiple software agents according to a predetermined policy. The process can further include facilitating secure communications among software agents of the network of the multiple software agents according to the predetermined policy. A state of one of the system, a system environment within which the system operates, or a combination thereof can be determined, based on the secure communications among the software agents of the network of the multiple software agents. A computing environment can be facilitated conditionally on the state of the one of the system, the system environment, or the combination thereof, according to the predetermined policy to support a mission application. Other embodiments are disclosed.

International (IPC 8-9): G06F21/12 G06F21/55 G06F9/445 H04L29/06
H04L9/08 H04W12/02 H04W12/04 (Advanced/Invention)

CPC: G06F21/554 H04L63/20 H04L63/0428 H04L9/0861 G06F8/65
H04L2209/80 H04L2209/84 G06F21/121 H04L63/06 H04W12/02
H04W12/04 H04W12/0023 H04W12/0013

US: 1/1 713/150 726/1



Publication number	Publication date	Application number	Application date
US2014020049 AA	20140116	US20130942319	20130715
US2016255058 AA	20160901	US20160150000	20160509
US9355228 BB	20160531	US20130942319	20130715

US20120671673P 20120713	US20120671675P 20120713	US20120671676P 20120713
US20130942319 20130715	US20160150000 20160509	

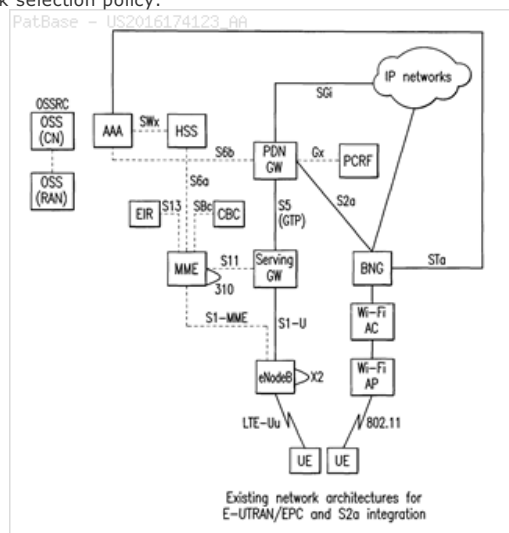
Agent(s): GUNTIN AND GUST PLC; RALPH

Title: AVOIDING MASS MIGRATION OF WIRELESS COMMUNICATION DEVICES FROM ONE ACCESS POINT TO ANOTHER

Abstract: A wireless communication device (WCD), network node, and methods for determining whether to steer traffic from a first access point to a second access point according to an access network selection policy. The WCD obtains at least one input parameter for use in an algorithm that is part of the access network selection policy, obtains a random value, and determines whether to steer traffic from the first access point to the second access point based at least in part on the at least one obtained input parameter and the obtained random value. The at least one input parameter may be determined by the network node and signaled to the WCD. The network node may signal an indication to the WCD to cause the WCD to apply a random value when determining whether to steer traffic in accordance with the access network selection policy.

Classifications:

International (IPC 8-9): H04W36/00 H04W36/08 H04W36/14 H04W36/22 H04W4/00 H04W48/16 H04W48/18 H04W84/00 (Advanced/Invention); H04W36/00 H04W36/14 H04W84/00 H04W84/12 (Advanced/Non-invention)
CPC: H04W36/22 H04W36/08 H04W48/16 H04W84/12 H04W84/005 H04W36/0066 H04W36/0083 H04W36/14 H04W48/18
US: 370/331



Family:

Publication number	Publication date	Application number	Application date
US2016174123 AA	20160616	US20140892475	20140520
US9843977 BB	20171212	US20140892475	20140520
WO14189448 A1	20141127	WO2014SE50615	20140520

Priority:

US20130825319P 20130520 US20140892475 20140520 WO2014SE50615 20140520

Probable Assignee: TELEFONAKTIEBOLAGET LM ERICSSON PUBL

Assignee(s): (std): ERICSSON TELEFON AB L M ; ERICSSON TELEFON AB L M PUBL ; TELEFONAKTIEBOLAGET L M ERICSSON PUBL ; TELEFONAKTIEBOLAGET LM ERICSSON PUBL

Inventor(s): (std): HEDBERG TOMAS ; MESTANOV FILIP ; BERGSTROEM MATTIAS ; TEYEB OUMER

Agent(s): ROTHWELL FIGG ERNST AND MANBECK PC; AYOUB NABIL

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 IR 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 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: OPERATIONS AND PROVISIONING SYSTEMS FOR SERVICE LEVEL MANAGEMENT IN AN EXTENDED-AREA DATA COMMUNICATIONS NETWORK

Abstract: An automated service level manager (SLM) provides operations support for wide-area data communication services offered via regional IP-Over Ethernet on fiber networks. The SLM comprises a suite of software components and associated hardware running the software, to communicate with agents throughout the networks, to accumulate various network operations data for reports and alarms and to provide instructions to control network operations. The SLM preferably offers a web server type user interface. This interface enables access by technical personnel of the carrier, for example from a network operations center. This interface also offers access to customers having or seeking service through the network.

Classifications:

International (IPC 8-9): H04L12/24 H04L12/26 (Advanced/Invention); H04L12/24 H04L12/26 (Core/Invention)

International (IPC 1-7): G06F15/173 G06F17/00 G06F9/00

CPC: Y10S707/99944 Y10S707/99945 Y10S707/99948 H04L41/5009 H04L41/0213 H04L41/046 H04L43/00 H04L43/06 H04L43/0811 H04L43/0817 H04L43/0829 H04L43/0852 H04L43/0864 H04L43/087 H04L43/10 H04L43/12

European: H04L12/24A2 H04L12/24A7 H04L12/24B3 H04L12/24S1B H04L12/26M H04L41/02B H04L41/04C H04L41/50A2 H04L43/00 T04L12/26M2B T04L12/26M3A1 T04L12/26M3A2 T04L12/26M3B1 T04L12/26M3C T04L12/26M3C2 T04L12/26M3C3 T04L12/26M4 T04L12/26M5 T04L43/06 T04L43/08C T04L43/08D T04L43/08E1 T04L43/08F T04L43/08F2 T04L43/08F3 T04L43/10 T04L43/12

US: 1/1 707/103 707/103R 707/104.1 707/999.103 707/999.104 707/999.107 709/104 709/224 709/226 718/104

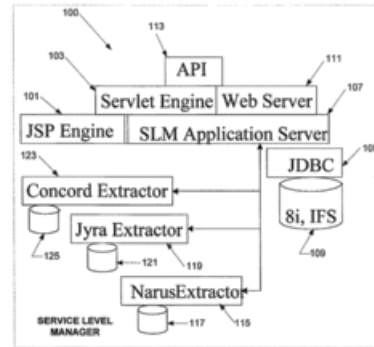


Fig. 1

Family:

Publication number	Publication date	Application number	Application date
US6681232 BA	20040120	US20010861887	20010522

Priority:

US20000209802P 20000607 US20010861887 20010522

Probable Assignee: PHX COMMUNICATIONS INC

Assignee(s): (std): YIPES ENTPR SERVICES INC

Assignee(s): NORWEST VENTURE PARTNERS VII LP ; NORWEST VENTURE PARTNERS VII LP 525 UNIVERSITY ; NORWEST VENTURE PARTNERS VII LP AGENT AS ; PHX COMMUNICATIONS INC ; YIPES ENTERPRISE SERVICES INC

Inventor(s): (std): SISTANIZADEH KAMRAN ; KAMALI MASOUD M

25) Family number: 57224803 (US2014233385A)

© PatBase

Title: METHODS AND NETWORK NODES FOR TRAFFIC STEERING BASED ON PER-FLOW POLICIES

Abstract: A method for redirecting a traffic flow in a communication network, in which a first or default service path has been configured for the traffic flow to go through is disclosed. The method comprises: receiving a notification message from a network node, the notification message including a traffic characteristic information of a packet of the traffic flow; creating a set of rules based on the received traffic characteristic information; and sending the set of rules to a plurality of switches in the communication network, the set of rules configuring a second or alternative service path to be used by subsequent packets of this traffic flow. Also, a network node for carrying out this method is provided.

Classifications:

International (IPC 8-9): H04L12/56 H04L12/803

H04L29/08 (Advanced/Invention);

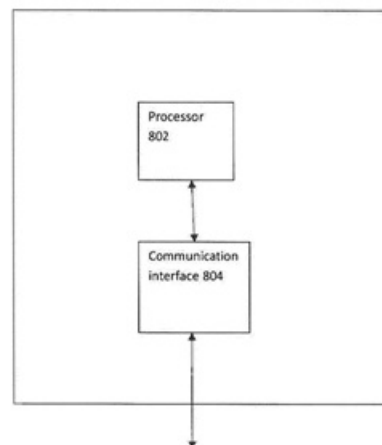
H04L12/801 (Advanced/Non-invention)

CPC: H04L47/122 H04L47/19 H04L67/148

US: 1/1 370/235

PatBase - US2014233385_AH

800



Family:

Publication number	Publication date	Application number	Application date
US2014233385 AA	20140821	US20130768956	20130215
US9413667 BB	20160809	US20130768956	20130215

Priority:

US20130768956 20130215

Probable Assignee: TELEFONAKTIEBOLAGET LM ERICSSON PUBL**Assignee(s):** (std): ERICSSON TELEFON AB L M PUBL ; L M ERICSSON PUBL TELEFONAKTIEBOLAGET ; TELEFONAKTIEBOLAGET L M ERICSSON PUBL ; TELEFONAKTIEBOLAGET LM ERICSSON PUBL**Inventor(s):** (std): BELIVEAU LUDOVIC ; SHIRAZIPOUR MERAL ; MANGHIRMALANI RAVI ; TRUCHAN CATHERINE**26) Family number: 52111868** (US2012259970A)

© PatBase

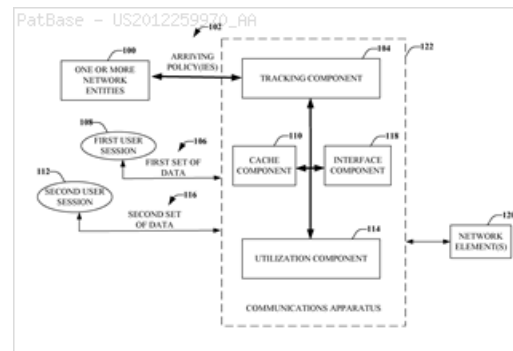
Title: POLICY AS A NETWORK SERVICE IN A MOBILE CORE NETWORK

Abstract: Aspects describe using a network element to facilitate scalability within a communication network and to provide policy as a network service in a mobile core network. The network element can be scalable and can be a primary policy access gateway for a first geographic region and can be a secondary policy access gateway for at least a second geographic region. The first geographic region and the second geographic region can have portions that overlap. Further, the network element can hide topology of the home network from roaming partners.

Classifications:**International (IPC 8-9):** G06F15/16 G06F15/173

H04W4/20 (Advanced/Invention);

H04W28/16 (Advanced/Non-invention)

CPC: H04W4/20 H04W28/16**European:** H04W4/20 T04W28/16**US:** 370/230 370/310 370/331 455/434 709/203 709/218 709/220 709/224 709/231 709/232**Family:**

Publication number	Publication date	Application number	Application date
US2012259970 AA	20121011	US20110081273	20110406
US8874729 BB	20141028	US20110081273	20110406
WO12138478 A2	20121011	WO2012US29947	20120321
WO12138478 A3	20121227	WO2012US29947	20120321

Priority:

US20110081273 20110406

Probable Assignee: AT AND T INTELLECTUAL PROPERTY I LP**Assignee(s):** (std): AT AND T IP I LP ; ENG DOUGLAS ; HU QINGMIN ; MCKNIGHT JIE**Assignee(s):** AT AND T INTELLECTUAL PROPERTY I L P ; AT AND T INTELLECTUAL PROPERTY I LP**Inventor(s):** (std): HU QINGMIN ; MCKNIGHT JIE ; ENG DOUGLAS**Agent(s):** AMIN TUROCY AND WATSON LLP; WATSON THOMAS 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 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**27) Family number: 54591972** (US2013219035A)

© PatBase

Title: DYNAMIC GROUP CREATION AND TRAFFIC FLOW REGISTRATION UNDER A GROUP IN A GROUP KEY INFRASTRUCTURE

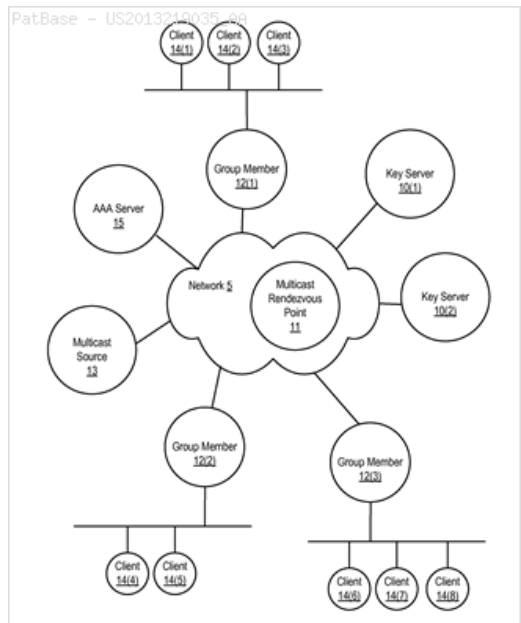
Abstract: Upon detection of a new traffic flow, a registration node can dynamically register the new traffic flow with a key server policy manager by sending a registration request on behalf of the new traffic flow. A registration request indicates the new traffic flow should be protected by a security group. A registration request may also include a request to dynamically generate a new security group to protect the traffic flow. The registration request is received by a key server policy manager, which performs authentication and authorization checks of the requesting registration node, and determines whether to accept or reject the registration request. If accepted, the key server policy manager registers the new traffic flow by including a description of the traffic flow in a group policy of an existing security group or a newly created security group, depending on the registration request.

Classifications:**International (IPC 8-9):** G06F15/16 G06F15/173 H04L29/06

H04L9/08 (Advanced/Invention);

H04L9/32 (Advanced/Non-invention)

CPC: H04L63/065 H04L9/0833 H04L9/3268**US:** 709/223 709/224 709/225 709/230 709/231 709/232 709/237



Family:

Publication number	Publication date	Application number	Application date
US2013219035 AA	20130822	US20120400841	20120221
US9009302 BB	20150414	US20120400841	20120221

Priority:

US20120400841 20120221

Probable Assignee: CISCO SYSTEMS INC

Assignee(s): (std): CISCO TECH INC ; DETIENNE FREDERIC R P ; SETHI PRATIMA ; WIJNANDS IJSBRAND

Assignee(s): CISCO TECHNOLOGY INC ; CISCO SYSTEMS INC

Inventor(s): (std): DETIENNE FREDERIC R P ; SETHI PRATIMA ; WIJNANDS IJSBRAND

Agent(s): CAMPBELL STEPHENSON LLP