

Search strategy

Query

..SEMSEARCH "BANDWIDTH CONFIGURATION" 12 "COMMUNICATION CIRCUITRY" 17 "COMMUNICATION NETWORK" 16 "DMR" 2 "FORWARD SEQUENCE GENERATION" 5 "MAPPING DEFINITION" 15 "NETWORK" 20 "NETWORK NODE" 100 "OFFSET SEQUENCE" 15 "OVERLAY" 24 "OVERLAYING PORTION" 16 "OVERLYING PORTION" 8 "PROCESSING CIRCUITRY" 8 "REFERENCE SIGNAL OFFSET" 8 "REFERENCE SIGNAL SEQUENCE" 100 "REFERENCE SUBCARRIER" 4 "SCHEDULED BANDWIDTH" 56 "SUBCARRIER" 23 "SYSTEM BANDWIDTH" 59 "WIRELESS COMMUNICATION" 100 "WIRELESS COMMUNICATION NETWORK" 100

1 AND EAPD >= 2016

20 Documents

Publication numbers	Title	Current assignees
US20180184306 A1	Coverage extension level for coverage limited device	INTEL, ...
EP3409042 A1	Managing reference signals in a wireless communication network	ERICSSON
EP3276849 A1	Resource allocation device and method in large-scale antenna system	SAMSUNG ELECTRONICS
EP3583733 A1	Methods and apparatus for reference signal design for interference cancellation	QUALCOMM
EP3322110 A1	Method and apparatus for measuring channel in mobile communication system	SAMSUNG ELECTRONICS
EP3456094 A1	Uplink-based cell selection	QUALCOMM
EP3529914 A1	Uplink reference signal	HUAWEI
EP3520288 A1	Facilitating uplink communication waveform selection	AT&T
US20200287757 A1	Systems and methods for time domain layer separation in orthogonal frequency division multiplexing-based receivers	SAMSUNG ELECTRONICS
EP3549286 A1	Techniques for transmitting or using a pull-in signal to locate a synchronization channel	QUALCOMM
EP3393054 A1	Method and apparatus for csi reporting	SAMSUNG ELECTRONICS
EP3605921 A1	Method and device for transmitting pilot frequency of channel state information, processor and storage medium	ZTE
EP3306881 A1	Channel measurement method in wireless communication system and apparatus therefor	LG ELECTRONICS
WO2018165018 A1	Techniques for improved beam management	INTEL, ...
EP3449681 A1	Measurement in non-cellular wireless networks	HUAWEI
EP3639442 A1	Signaling information in physical broadcast channel (pbch) demodulation reference signals (dmrs)	QUALCOMM
WO2016182363 A1	Method for reporting channel state in wireless communication system and apparatus therefor	LG ELECTRONICS
EP3365986 A1	Method and apparatus for defining wideband cqi in wireless communication system	LG ELECTRONICS
EP3626002 A1	Techniques and apparatuses for reusing remaining minimum system information configuration bits to signal a synchronization signal block location	QUALCOMM
US20200187214 A1	System and method for spectrum sharing and interference management between wireless systems	FEDERATED WIRELESS

Family 1/20 - FAMPAT - ©Questel

Title

(US10419947)

Coverage extension level for coverage limited device

Publication numbers

US10419947

US20180184306

Publication dates

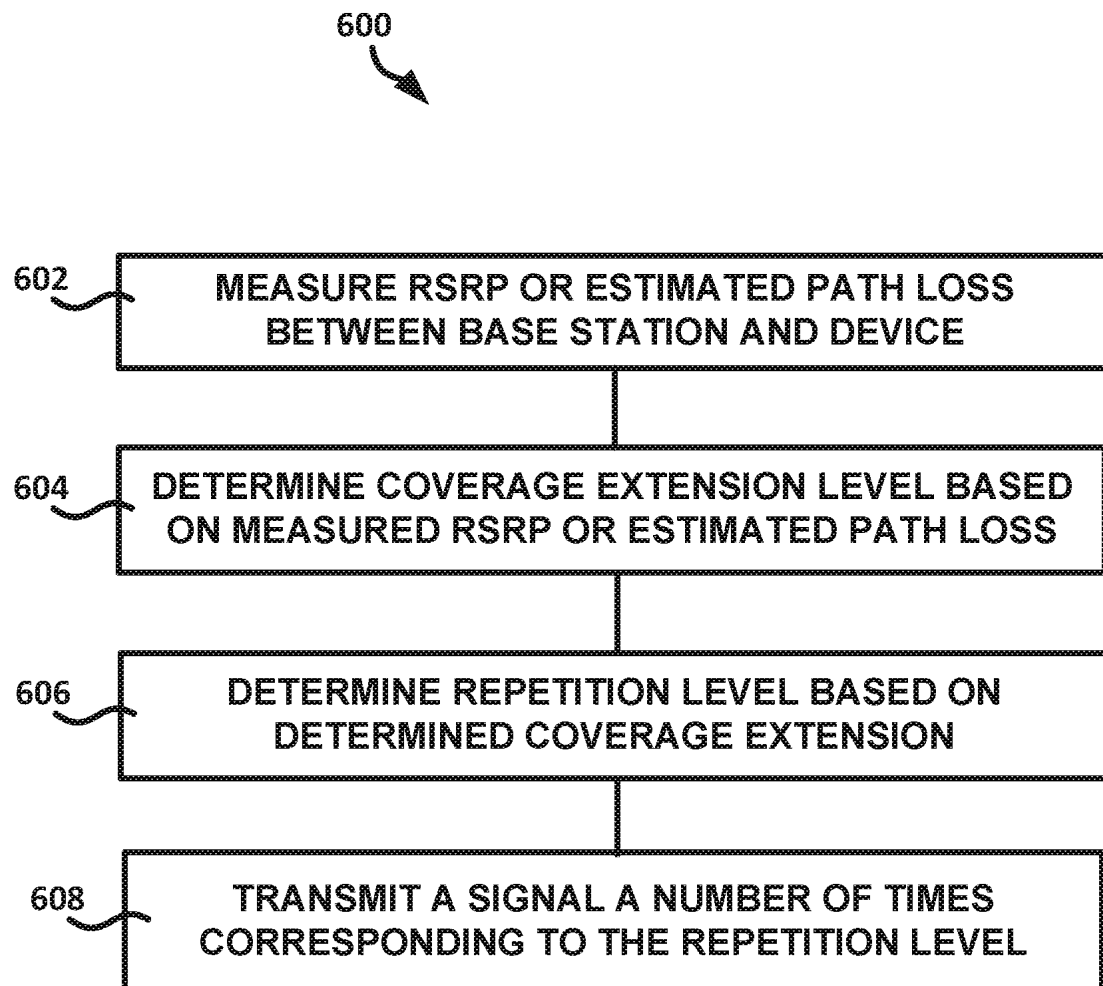
2019-09-17

2018-06-28

Abstract

(US20180184306)

Generally discussed herein are systems, apparatuses, and methods that can provide a coverage enhancement to a coverage limited device. According to an example a method can include determining a received signal strength of a reference signal transmitted from a base station, determining a coverage enhancement based on the determined signal strength, or transmitting a signature sequence of a plurality of signature sequences a first repeated number of times corresponding to the determined coverage enhancement.

Images

Family 2/20 - FAMPAT - ©Questel

Title

(EP3409042)

Managing reference signals in a wireless communication network

Publication numbers

ZA201903013

EP3409042

US10708025

IN201737007934

RU2720256

JP2020502929

US20190273583

CN110063067

EP3409042

EP3409042

CA3047667

WO2018/112735

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2020-09-30

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2020-06-12

2020-04-28

2020-01-23

2019-09-05

2019-07-26

2018-12-05

2018-12-05

2018-06-28

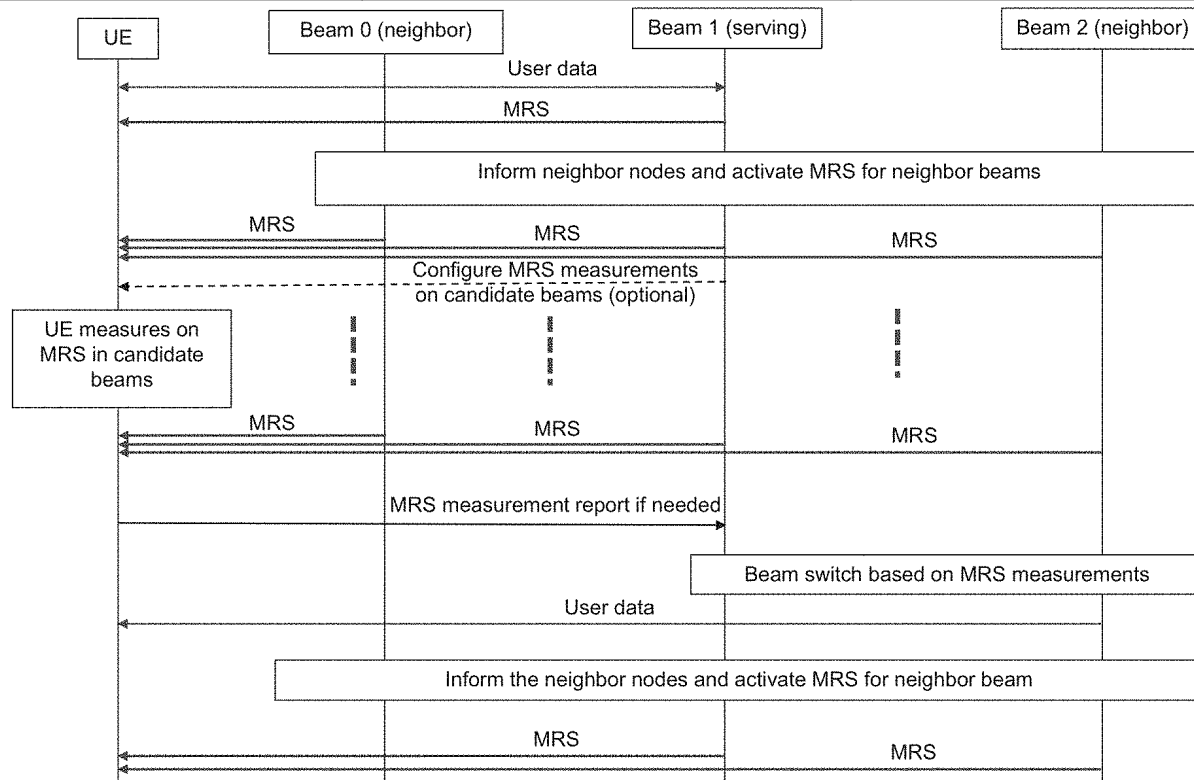
2018-06-28

Abstract

(EP3409042)

There is provided a method for selectively enabling periodic transmission of reference signals in a wireless communication network. The method comprises obtaining (S1) information of user activity in one or more beams, cells or sector, and performing (S2) at least one of activating and deactivating, for at least one beam, cell or sector, periodic transmission of reference signals based on the obtained information.

Images



Family 3/20 - FAMPAT - ©Questel

Title

(EP3276849)

Resource allocation device and method in large-scale antenna system

Publication numbers

US10721037

US20200228281

US10659204

AU2016241468

JP2018512027

EP3276849

US20180091273

EP3276849

VN55761

CN107567695

KR10-2017-0134526

AU2016241468

IN201737037486

AU2016241468

CA2981136

WO2016/159621

Publication dates

2020-07-21

2020-07-16

2020-05-19

2020-01-30

2018-04-26

2018-04-18

2018-03-29

2018-01-31

2018-01-25

2018-01-09

2017-12-06

2017-11-30

2017-11-17

2017-11-09

2016-10-06

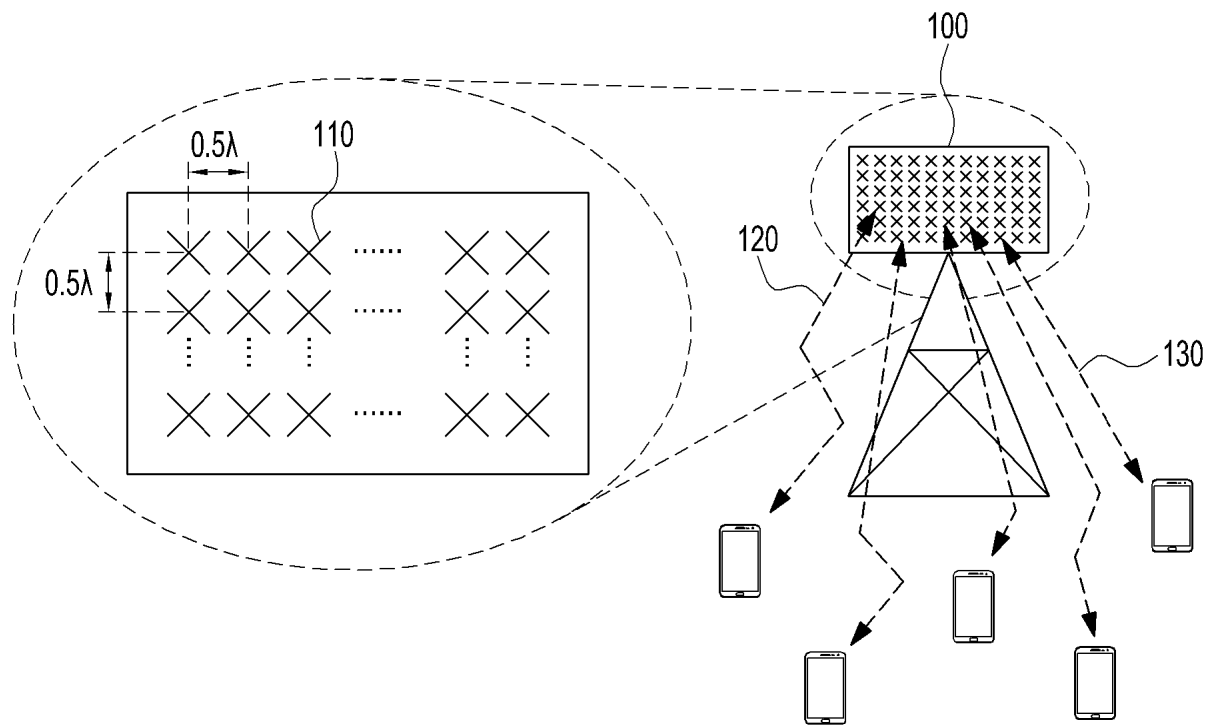
2016-10-06

Abstract

(EP3276849)

The present disclosure relates to a 5G or pre-5G communication system for supporting a higher data transmission rate beyond a 4G communication system such as LTE. To this end, a base station using a large-scale antenna transmits, to a terminal, reference signal resource configuration information including multiple pieces of reference signal configuration information and reference signal port information, for transmission of a reference signal, and transmits the reference signal to the terminal using some or all of channel measurement resources indicated by the multiple pieces of reference signal configuration information and the reference signal port information included in the reference signal resource configuration information. In this case, the channel measurement resources may correspond to antenna ports, the number of which is indicated by a combination of the multiple pieces of reference signal configuration information and the reference signal port information.

Images



Family 4/20 - FAMPAT - ©Questel

Title

(EP3583733)

Methods and apparatus for reference signal design for interference cancellation

Publication numbers

EP3583733

IN201927027203

CN110291749

US10333755

WO2018/151896

US20180234277

Publication dates

2019-12-25

2019-12-20

2019-09-27

2019-06-25

2018-08-23

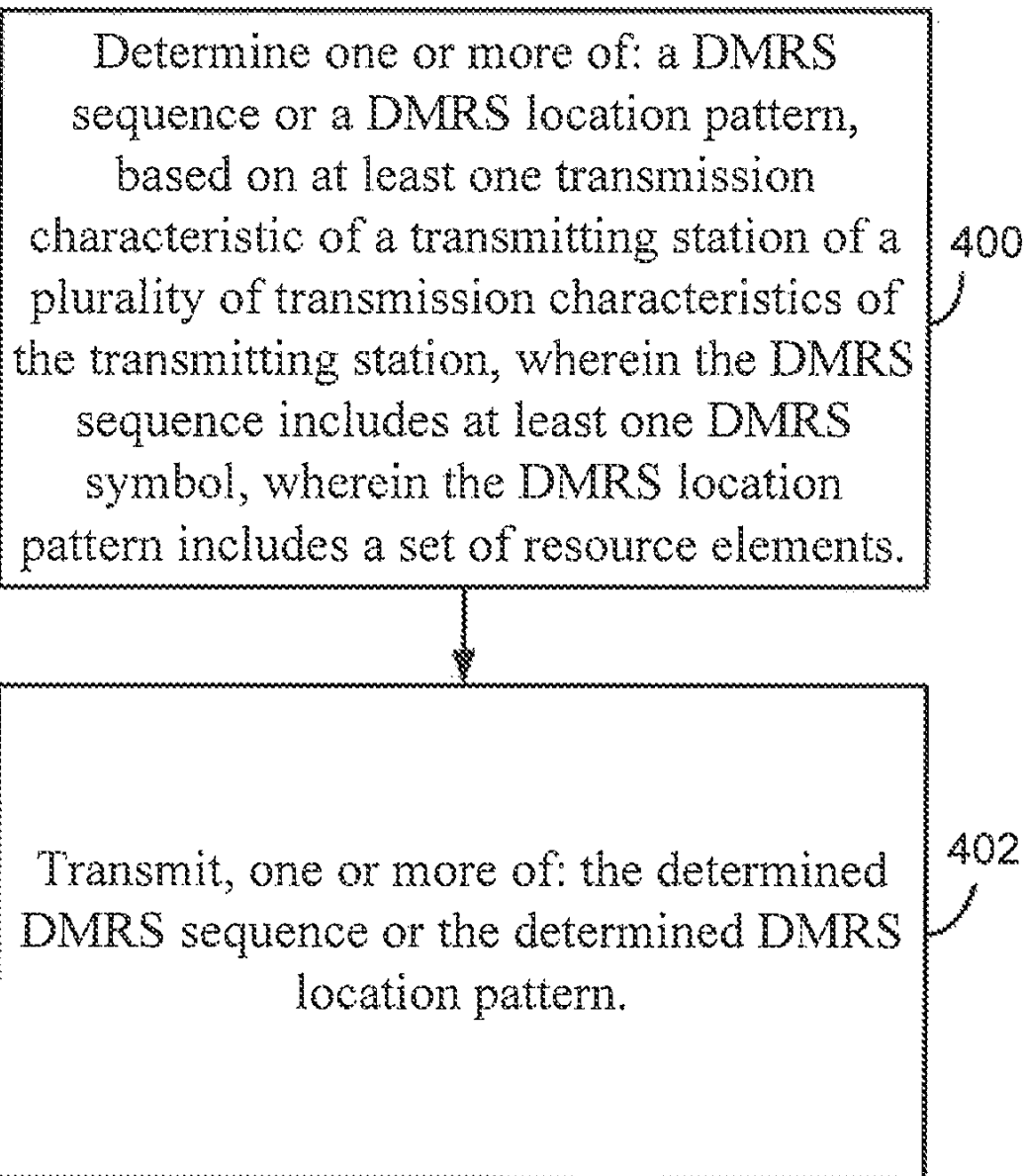
2018-08-16

Abstract

(EP3583733)

Methods and apparatus for reference signal design are provided. In some aspects, a base station determines one or more of: a demodulation reference signal (DMRS) sequence or a DMRS location pattern, based: on at least one of a plurality of transmission characteristics, and transmits one or more of the determined DMRS sequence or the determined DMRS location pattern. In further aspects, a user equipment identifies one or more of: a demodulation reference signal (DMRS) sequence or a DMRS location pattern from a base station, determines at least one of a plurality of transmission characteristics of the first base station based on one or more of: the identified DMRS sequence, or the identified DMRS location pattern, and performs interference cancellation for transmissions from the base station.

Images



Family 5/20 - FAMPAT - ©Questel

Title

(EP3322110)

Method and apparatus for measuring channel in mobile communication system

Publication numbers

US10644903

US20180205577

EP3322110

EP3322110

KR10-2018-0021201

WO2017/007240

Publication dates

2020-05-05

2018-07-19

2018-06-27

2018-05-16

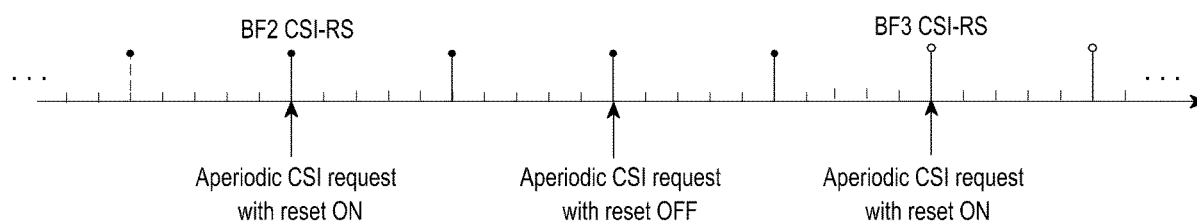
2018-02-28

2017-01-12

Abstract

(EP3322110)

The present disclosure relates to a 5G or pre-5G communication system for supporting a data transmission rate higher than a 4G communication system such as LTE. A method proposed in an embodiment of the present disclosure is a method for measuring a channel in a mobile communication system, comprising the steps of: receiving, from a base station, setting information for measuring a channel by using a reference signal; receiving the reference signal from the base station; measuring the channel by using the reference signal on the basis of the setting information; and transmitting information on the measured channel to the base station, wherein the setting information comprises at least one from among information related to time for measuring the channel and information related to the number of ports with respect to the reference signal.

Images

Family 6/20 - FAMPAT - ©Questel

Title

(EP3456094)

Uplink-based cell selection

Publication numbers

EP3456094

EP3456094

US10219259

CN109076412

IN201847037280

US20170332371

WO2017/196940

Publication dates

2020-03-18

2019-03-20

2019-02-26

2018-12-21

2018-11-16

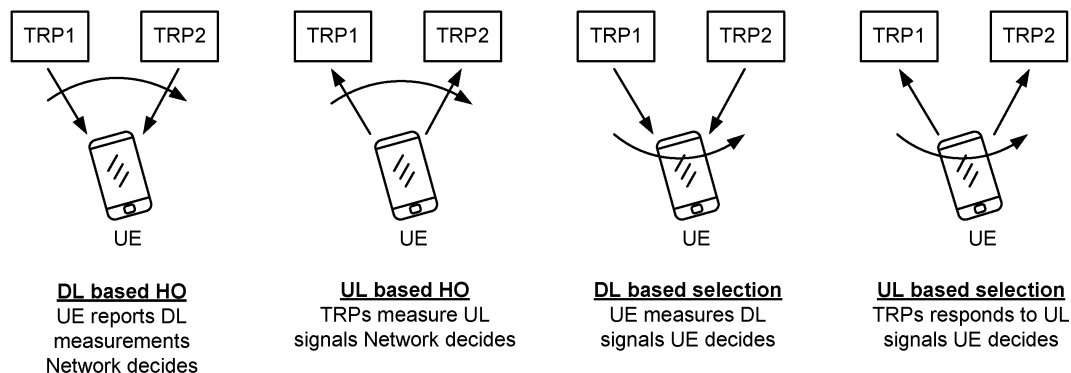
2017-11-16

2017-11-16

Abstract

(EP3456094)

Aspects of the present disclosure provide apparatus and techniques that may be applied in systems for improving reliability of cell selection to ensure that a UE is capable of transmitting on the uplink in addition to receiving on the downlink upon mobility. An exemplary method, performed by a user equipment (UE), generally includes receiving reference signals from one or more transmission reception points (TRPs) in a wireless communications network, pre-selecting, based on the received reference signals, a first TRP, of the one or more TRPs, from which to receive wireless service, transmitting an uplink (UL) signal to the first TRP, receiving, from the first TRP, feedback comprising information about the UL signal, and determining, based at least in part on the feedback, to select the first TRP from which to receive the wireless service.

Images

Family 7/20 - FAMPAT - ©Questel

Title

(EP3529914)

Uplink reference signal

Publication numbers

CN109906566

US20200092151

US10530622

EP3529914

US10491439

EP3529914

CN109906566

WO2018/082621

US20180123850

Publication dates

2020-11-17

2020-03-19

2020-01-07

2019-12-18

2019-11-26

2019-08-28

2019-06-18

2018-05-11

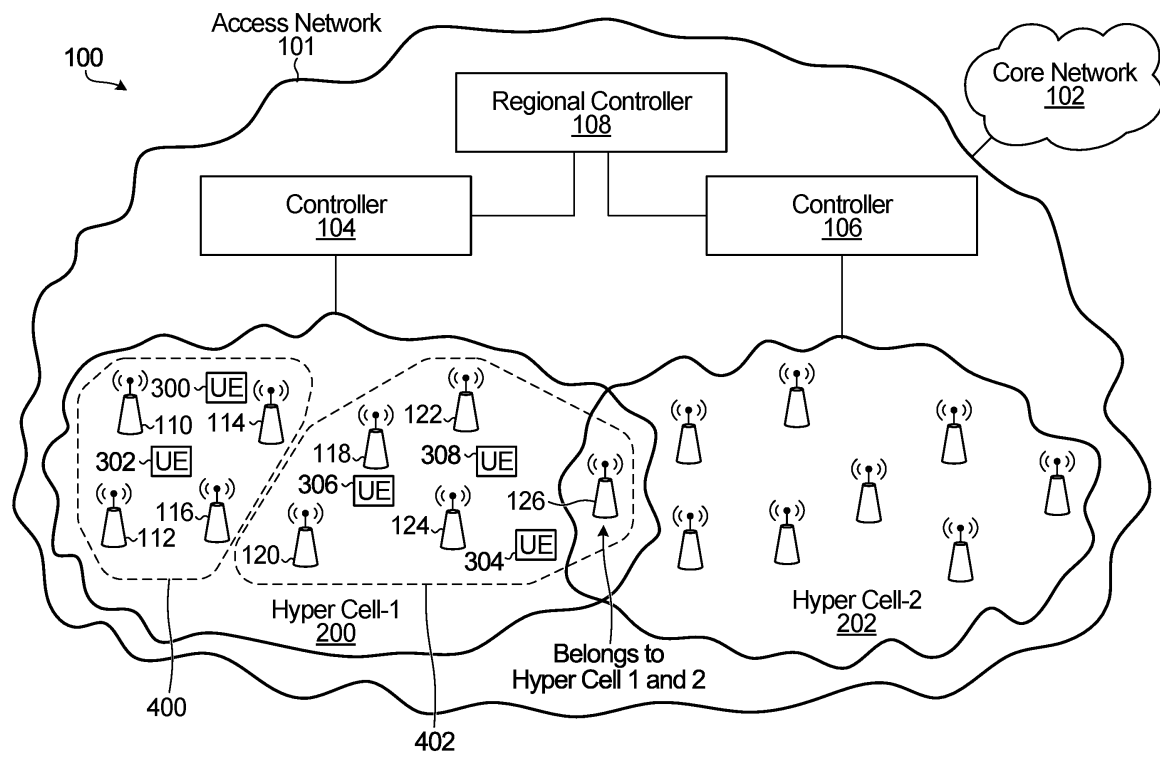
2018-05-03

Abstract

(EP3529914)

Methods and devices for configurable sequence usage for user equipment (UE) uplink reference signaling are provided. In one provided method, a transmission reception point (TRP) in a wireless communication network receives a first UL reference signal (RS) associated with a first UL RS sequence from a first UE and receives a second UL RS associated with a second UL RS sequence from a second UE, the first and second UL RS sequences being non-orthogonal. In another provided method, A UE determines an UL RS sequence based on a UL RS sequence root, the UL RS sequence root being a UE-specific root and being independent of a cell identifier of a cell serving the UE. The UE sends an UL RS associated with the UL RS sequence, the UL RS sequence being a Zadoff-Chu sequence.

Images



Family 8/20 - FAMPAT - ©Questel

Title

(EP3520288)

Facilitating uplink communication waveform selection

Publication numbers

US20200187202

US10602507

JP2019537860

EP3520288

CN109906582

IN201947011929

KR10-2019-0043166

WO2018/063893

US20180092086

Publication dates

2020-06-11

2020-03-24

2019-12-26

2019-08-07

2019-06-18

2019-05-10

2019-04-25

2018-04-05

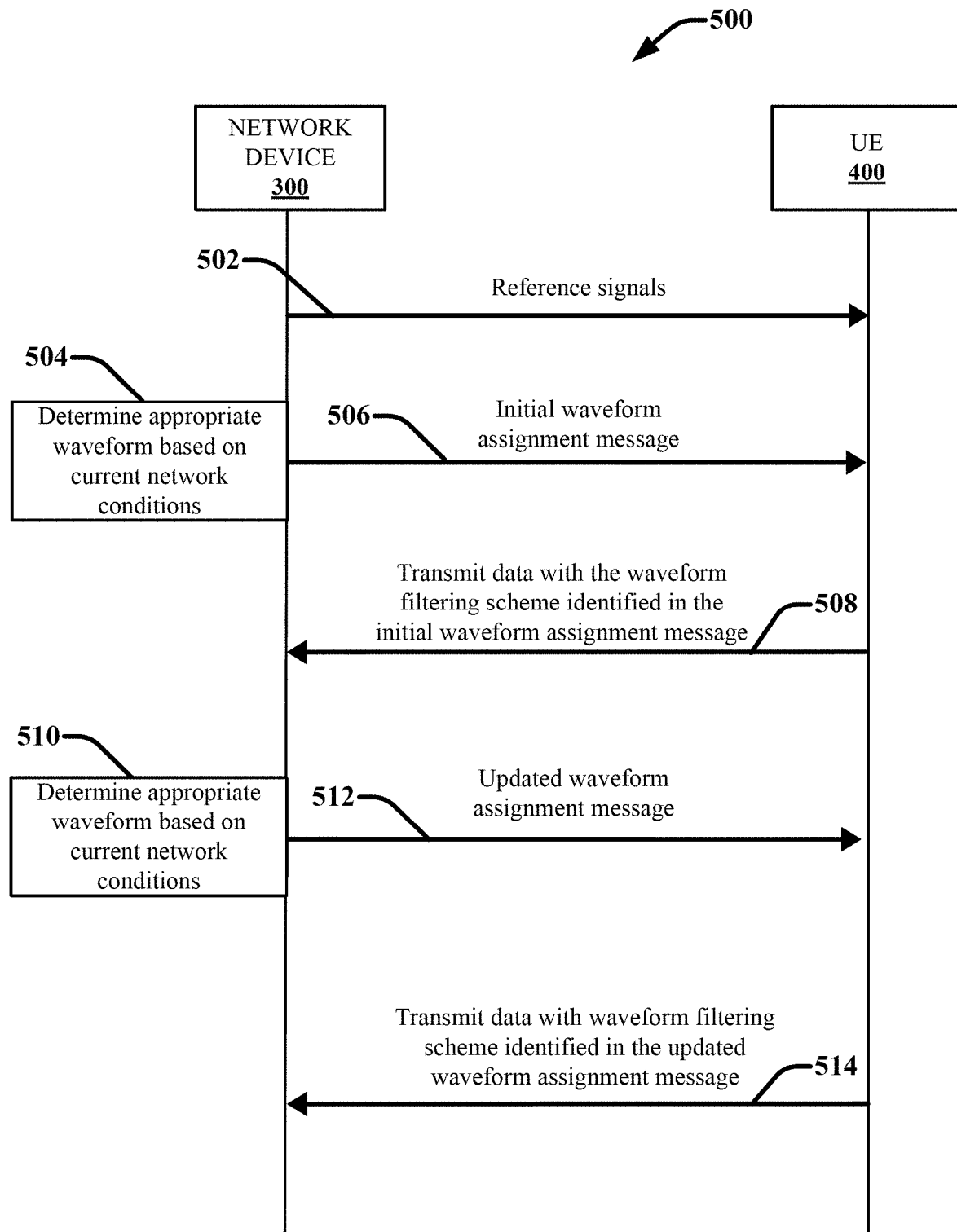
2018-03-29

Abstract

(EP3520288)

The disclosed subject matter relates to facilitating uplink communication waveform selection in wireless communication systems, and more particularly Fifth Generation (5G) wireless communication systems. In one or more embodiments, a system is provided comprising a processor and a memory that stores executable instructions that, when executed by the processor, facilitate performance of operations. These operations can comprise facilitating establishing a wireless communication link between a first device and a second network device of a wireless communication network, and determining a waveform filtering protocol for application by the first device in association with performance of uplink data transmissions from the first device to the second network device.

Images



Family 9/20 - FAMPAT - ©Questel

Title

(US20200287757)

Systems and methods for time domain layer separation in orthogonal frequency division multiplexing-based receivers

Publication numbers

US20200287757

US10700896

KR10-2020-0054842

CN111181888

TW202019139

US20200153664

Publication dates

2020-09-10

2020-06-30

2020-05-20

2020-05-19

2020-05-16

2020-05-14

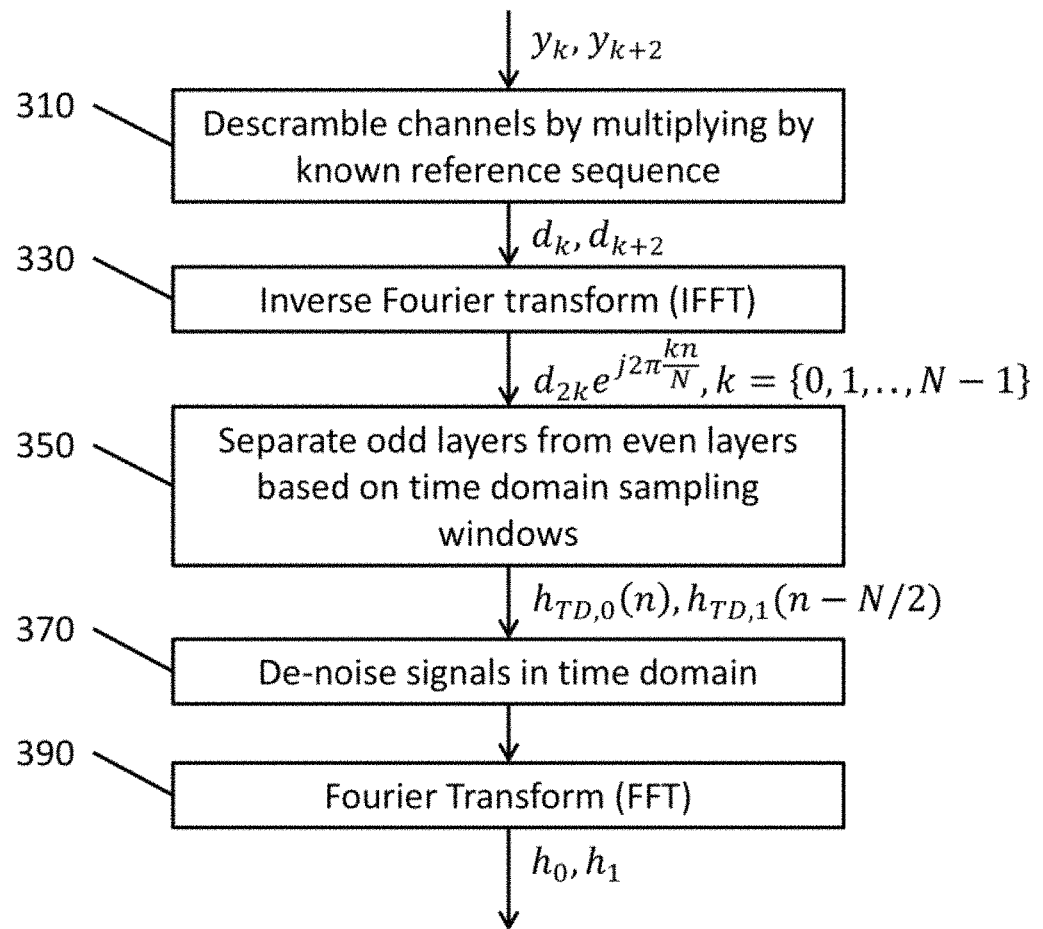
Abstract

(US20200287757)

A receiver circuit for separating a plurality of layers multiplexed in an orthogonal frequency domain multiplexed (OFDM) signal includes: a descrambling sub-circuit configured to descramble a plurality of signals received on non-adjacent subcarriers of the OFDM signal to generate a plurality of descrambled signals; an inverse fast Fourier transform sub-circuit configured to transform the descrambled signals from a frequency domain to a received signal including a plurality of samples in a time domain; and a layer separation sub-circuit configured to separate the layers multiplexed in the received signal by: defining a first time domain sampling window and a second time domain sampling window in accordance with a size of the inverse fast Fourier transform; extracting one or more first layers from the samples in the first time domain sampling window; and extracting one or more second layers from the samples in the second time domain sampling window.

Images

300



Family 10/20 - FAMPAT - ©Questel

Title

(EP3549286)

Techniques for transmitting or using a pull-in signal to locate a synchronization channel

Publication numbers

EP3549286

US10541771

US10530514

EP3549286

CN109964424

IN201947014286

US10285120

US20180262977

TW201826851

US20180167155

US20180159649

WO2018/102735

Publication dates

2020-11-04

2020-01-21

2020-01-07

2019-10-09

2019-07-02

2019-06-07

2019-05-07

2018-09-13

2018-07-16

2018-06-14

2018-06-07

2018-06-07

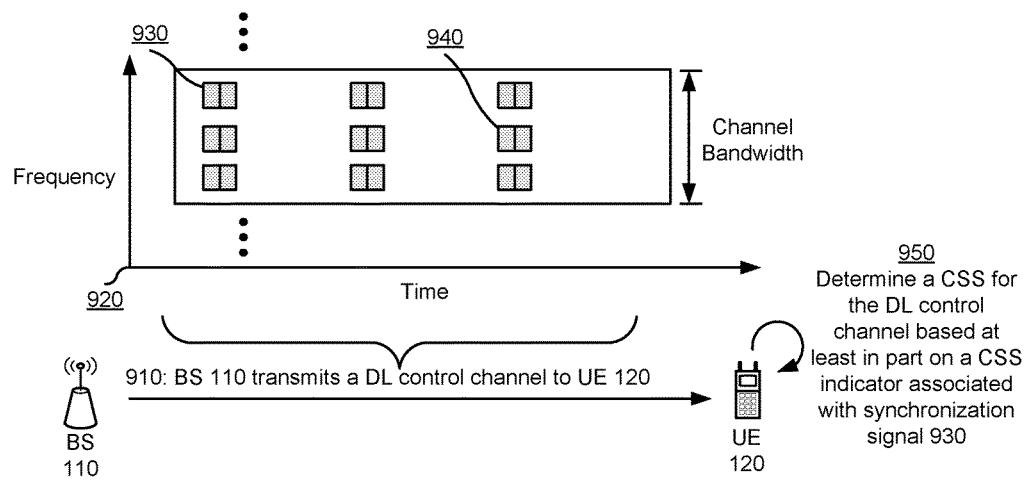
Abstract

(EP3549286)

Techniques are described for wireless communication. One method includes searching for a synchronization channel on a first raster point of a frequency raster identified for synchronization channel transmission. The frequency raster includes a plurality of raster points in a radio frequency spectrum. The method also includes identifying a pull-in signal on the first raster point; determining, from the pull-in signal, a second raster point of the frequency raster on which the synchronization channel is transmitted; and receiving the synchronization channel on the second raster point. Another method includes transmitting the pull-in signal and the synchronization channel.

Images

900



Family 11/20 - FAMPAT - ©Questel

Title

(EP3393054)

Method and apparatus for csi reporting

Publication numbers

US20200052863

US20190182013

US10211964

EP3393054

ES2684337

EP3125438

IN201817001971

CN107852219

US20170033912

WO2017/018839

EP3125438

Publication dates

2020-02-13

2019-06-13

2019-02-19

2018-10-24

2018-10-02

2018-07-25

2018-04-20

2018-03-27

2017-02-02

2017-02-02

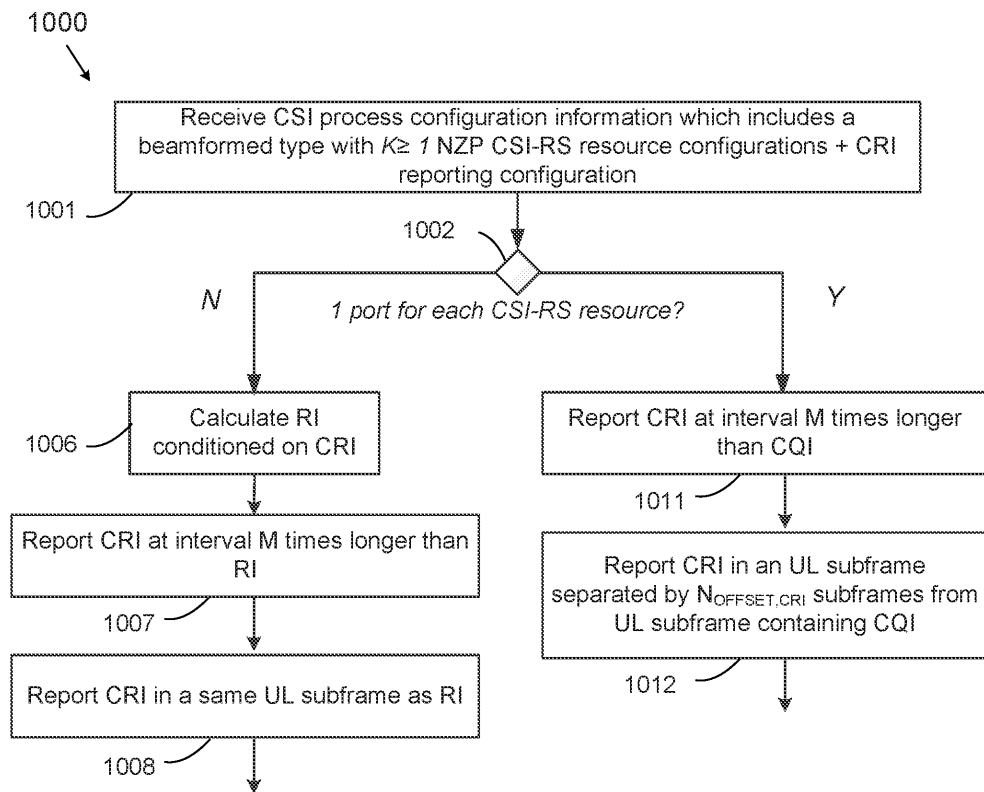
2017-02-01

Abstract

(EP3393054)

Methods and apparatuses for CSI reporting mechanisms are provided. A user equipment (UE) includes a transceiver and a processor operably connected to the transceiver. The transceiver is configured to receive channel state information (CSI) process configuration information including at least one beamformed type associated with a plurality of non-zero-power (NZP) CSI reference signal (CSI-RS) resource configurations and receive a CSI-RS resource index (CRI) reporting configuration. The processor is configured to calculate, in response to receipt of the configuration information, a CRI and a channel quality indicator (CQI). The transceiver is further configured to report the CRI and the CQI by transmitting the CRI and the CQI on an uplink channel.

Images



Family 12/20 - FAMPAT - ©Questel

Title

(EP3605921)

Method and device for transmitting pilot frequency of channel state information, processor and storage medium

Publication numbers

US10833746

JP2020515172

EP3605921

US20200028557

KR10-2019-0127930

CN108631994

WO2018/171687

Publication dates

2020-11-10

2020-05-21

2020-02-05

2020-01-23

2019-11-13

2018-10-09

2018-09-27

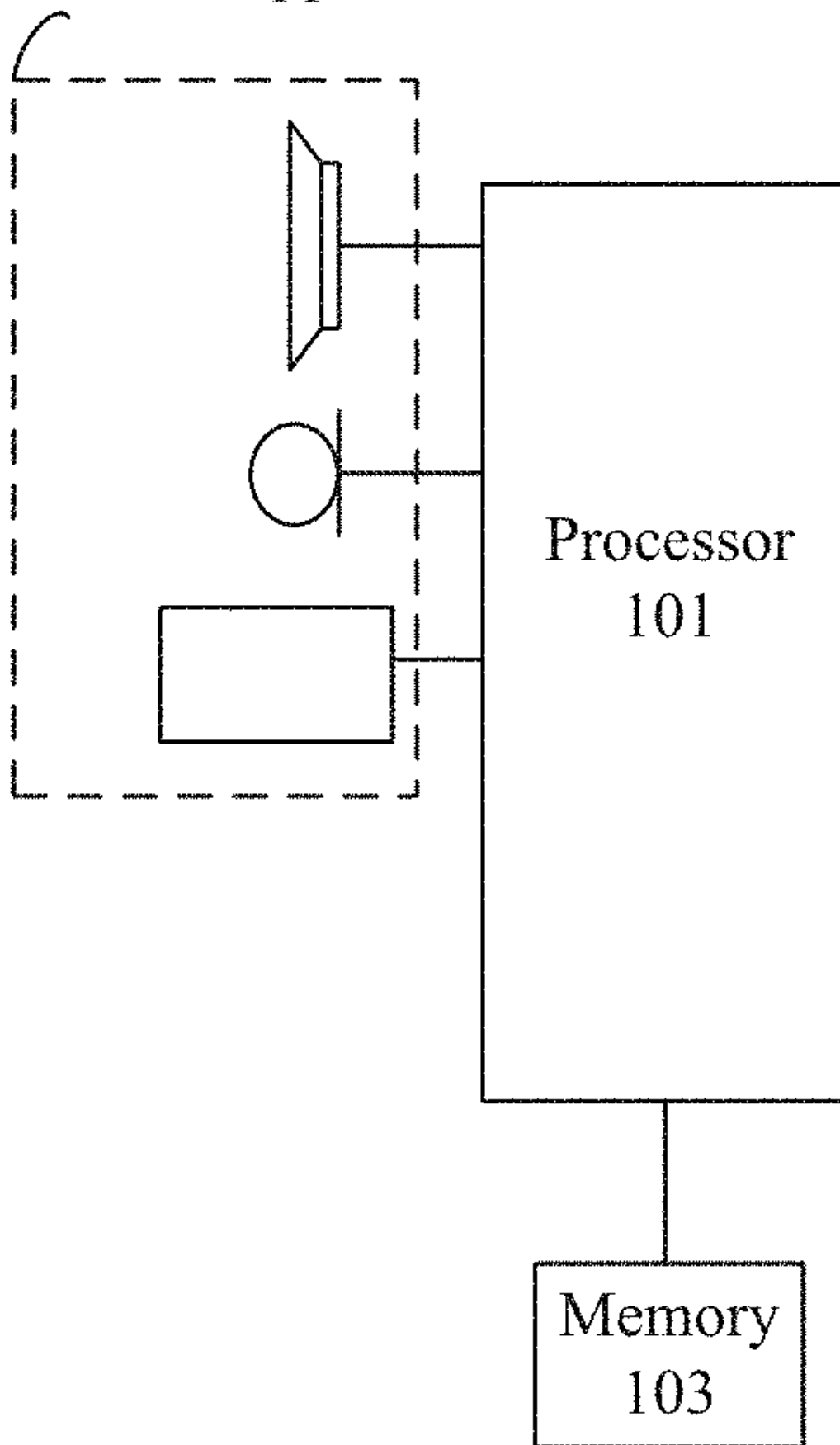
Abstract

(EP3605921)

Disclosed are a method and device for transmitting a channel state information-reference signal, a processor and a storage medium. The method includes: determining, by a base station, channel state information-reference signal, where the channel state information-reference signal at least includes the number of CSI-RS ports and information of components, the CSI-RS ports are used for transmitting the CSI-RS, and a CSI-RS resource is used for carrying the CSI-RS; sending, by the base station, the information of the CSI-RS to a terminal; and transmitting, by the base station, the CSI-RS. In such a way, the technical problems in the related art of poor channel measurement performance and high system complexity are solved.

Images

Transmission apparatus 105



Family 13/20 - FAMPAT - ©Questel

Title

(EP3306881)

Channel measurement method in wireless communication system and apparatus therefor

Publication numbers

US10574486

EP3306881

US20180152324

EP3306881

CN107683571

WO2016/200106

Publication dates

2020-02-25

2019-02-13

2018-05-31

2018-04-11

2018-02-09

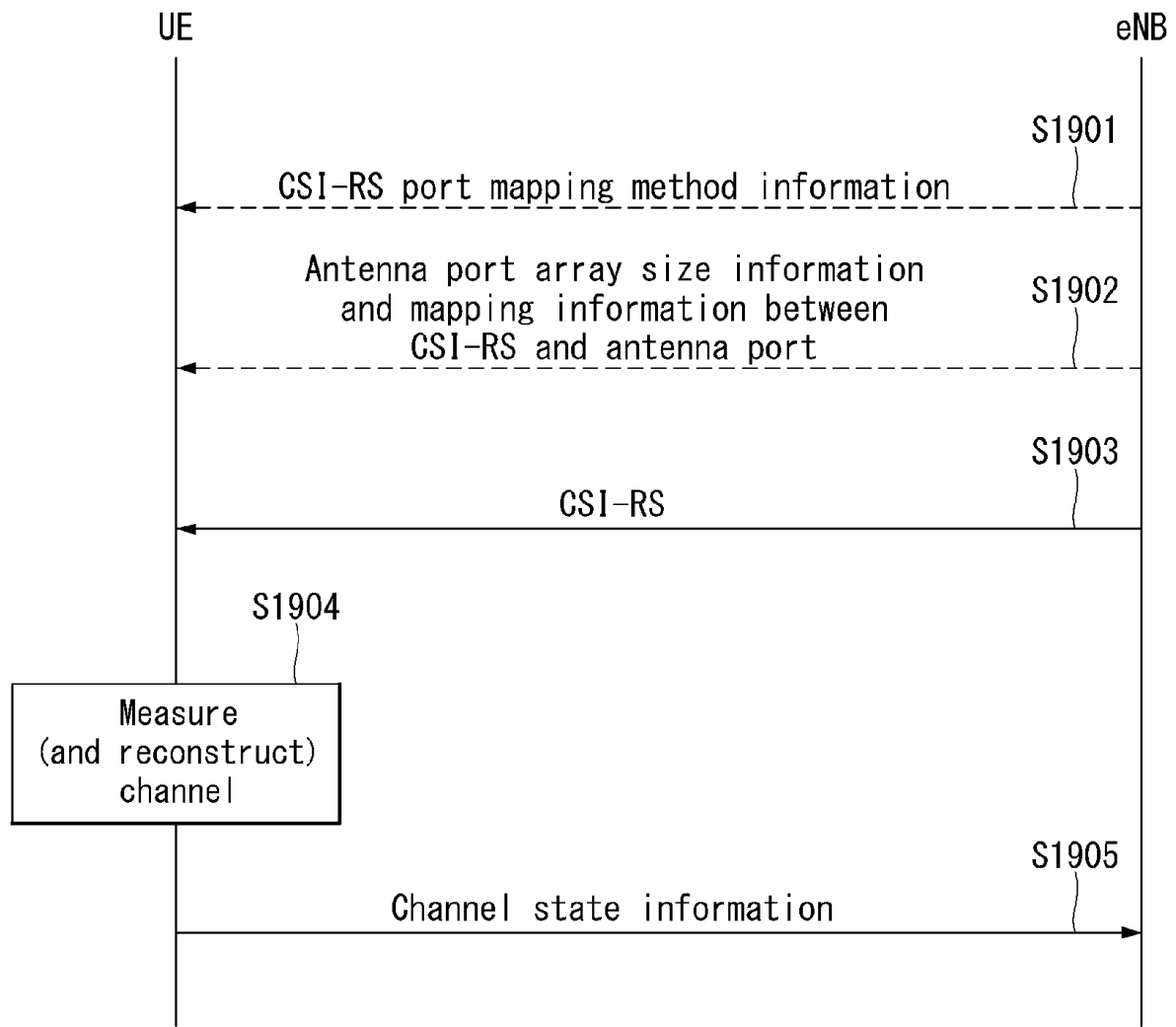
2016-12-15

Abstract

(EP3306881)

A channel measurement method in a wireless communication system and an apparatus therefor are disclosed. Specifically, a method for measuring a channel by a terminal in the wireless communication system may comprise the steps of: receiving, from a base station, a reference signal on part of antenna ports within a two-dimensional antenna port array; measuring channels for the part of antenna ports on the basis of the reference signal received from the base station; and reconstructing a channel for an antenna port which is not used for transmission of the reference signal within the two-dimensional antenna port array, using the channel measurement result, to reconstruct channels for all antenna ports within the two-dimensional antenna port array.

Images



Family 14/20 - FAMPAT - ©Questel

Title

(WO2018165018)

Techniques for improved beam management

Publication numbers

US20200059286

DE112018000358

CN110226291

WO2018/165018

Publication dates

2020-02-20

2019-09-26

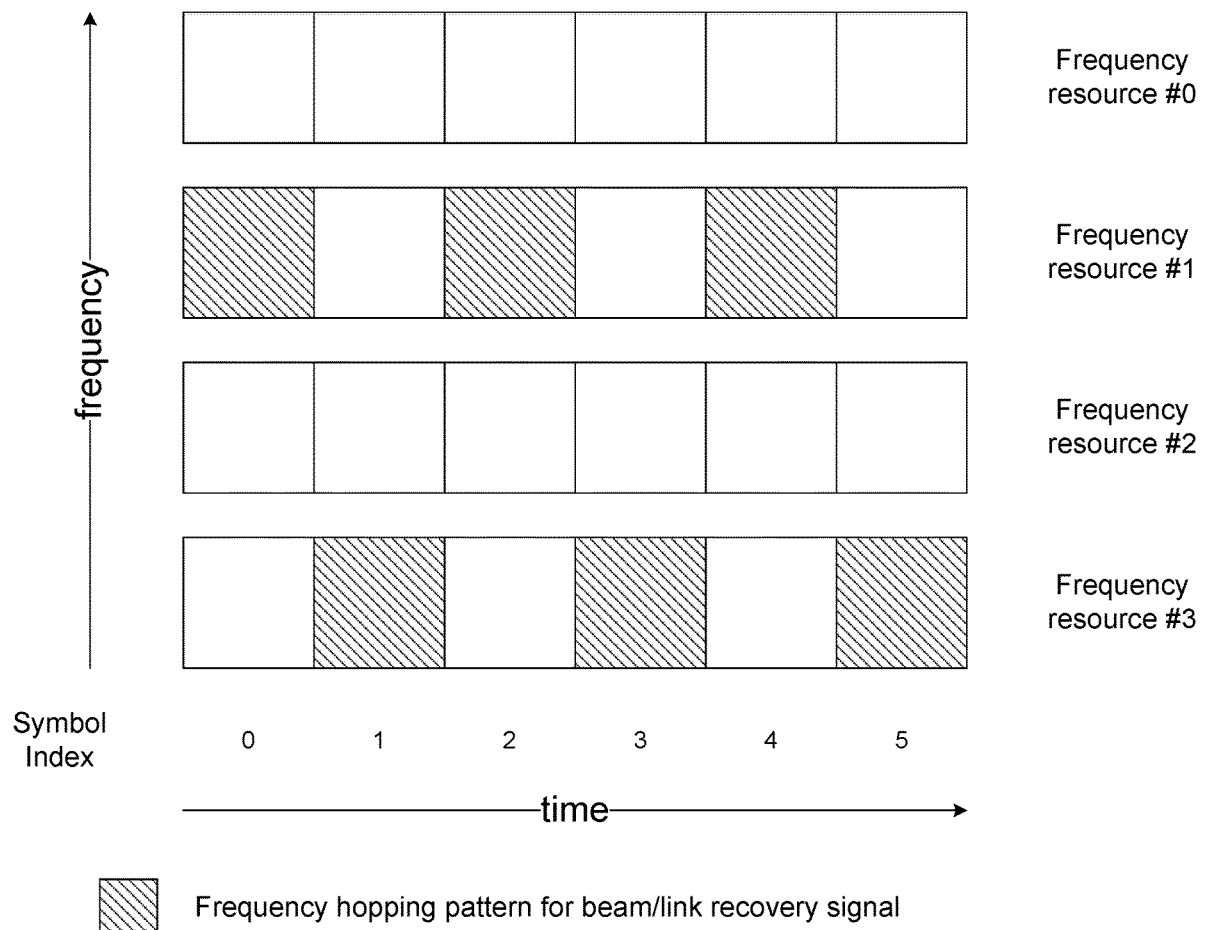
2019-09-10

2018-09-13

Abstract

(WO2018/165018)

Techniques discussed herein can facilitate maintenance and/or recovery of BPL(s) (Beam Pair Link(s)). Various embodiments can employ aspects discussed herein can one or more of enable interference randomization for beam/link recovery signal(s) or reduce the overhead of UL (Uplink) beam management RS (Reference Signal(s)). Various embodiments can comprise UE(s) (User Equipment(s)) that can receive configuration signaling configuring the UE(s) to one or more of apply interference randomization to a beam/link recovery signal and/or generate a SR (Scheduling Request) channel for beam maintenance having reduced overhead and can transmit the beam/link recovery signal and/or SR channel. Additional embodiments can comprise gNB(s) (next Generation NodeB(s)) that can configure UE(s) for beam maintenance and/or recovery techniques discussed herein.

Images

Family 15/20 - FAMPAT - ©Questel

Title

(EP3449681)

Measurement in non-cellular wireless networks

Publication numbers

US20200304344

US10680855

JP2019521569

EP3449681

VN62209

EP3449681

BR112018073263

CN109156007

IN201837043262

BR112018073263

CA3023975

US20170331645

WO2017/193973

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2020-09-24

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2019-07-25

2019-04-24

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2019-01-04

2018-12-14

2018-11-21

2017-11-16

2017-11-16

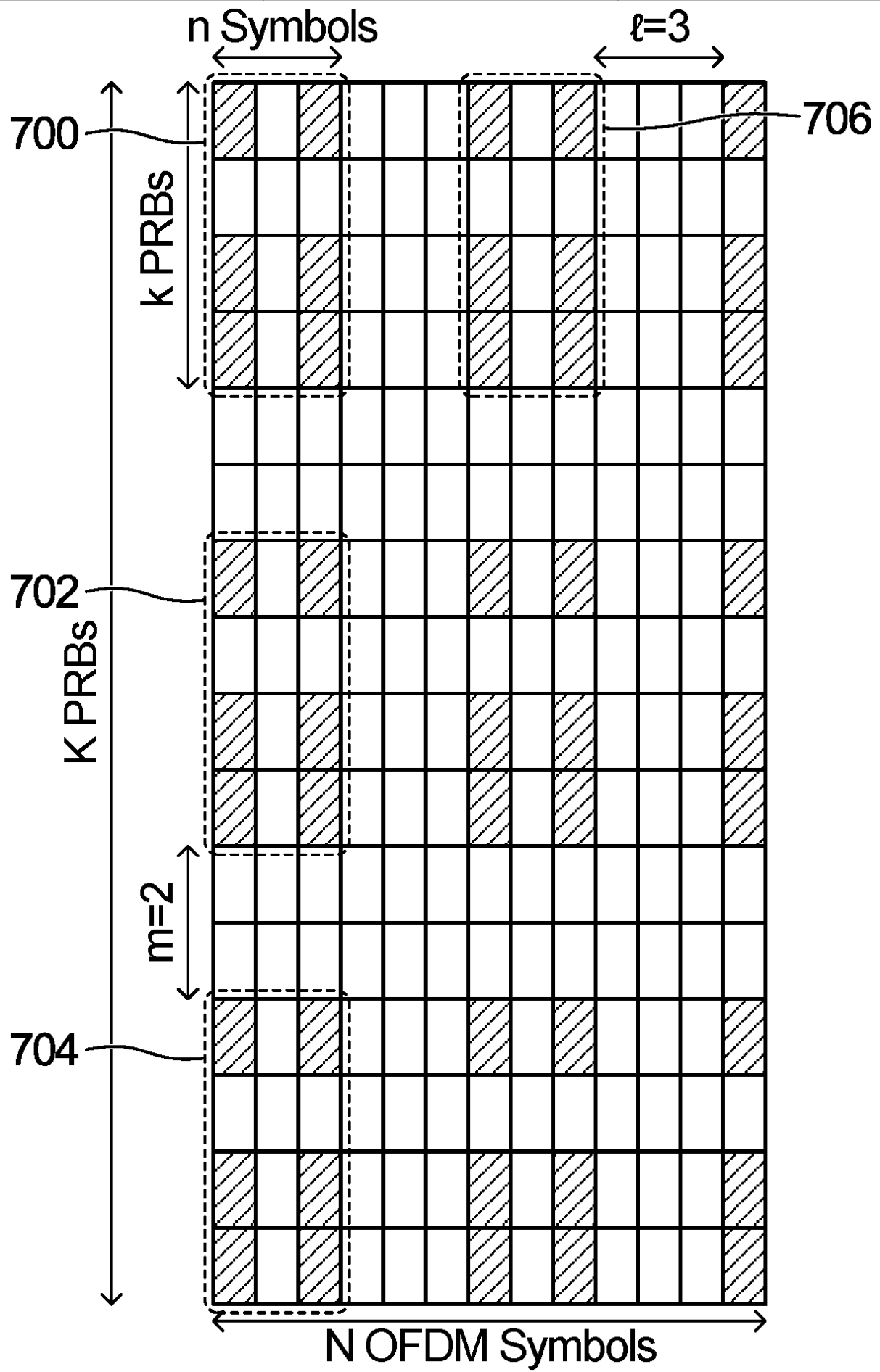
2017-11-16

Abstract

(EP3449681)

Systems and methods of assigning channel state information-reference symbol (CSI-RS) ports to user equipment are provided. In addition resource configurations for transmission of CSI-RS are provided, and methods of mapping CSI-RS sequences to such resources are provided.

Images



Family 16/20 - FAMPAT - ©Questel

Title

(EP3639442)

Signaling information in physical broadcast channel (pbch) demodulation reference signals (dmrs)

Publication numbers

US20200252183

US10666406

EP3639442

CN110741596

IN201947045276

US20180367269

WO2018/231436

Publication dates

2020-08-06

2020-05-26

2020-04-22

2020-01-31

2019-11-22

2018-12-20

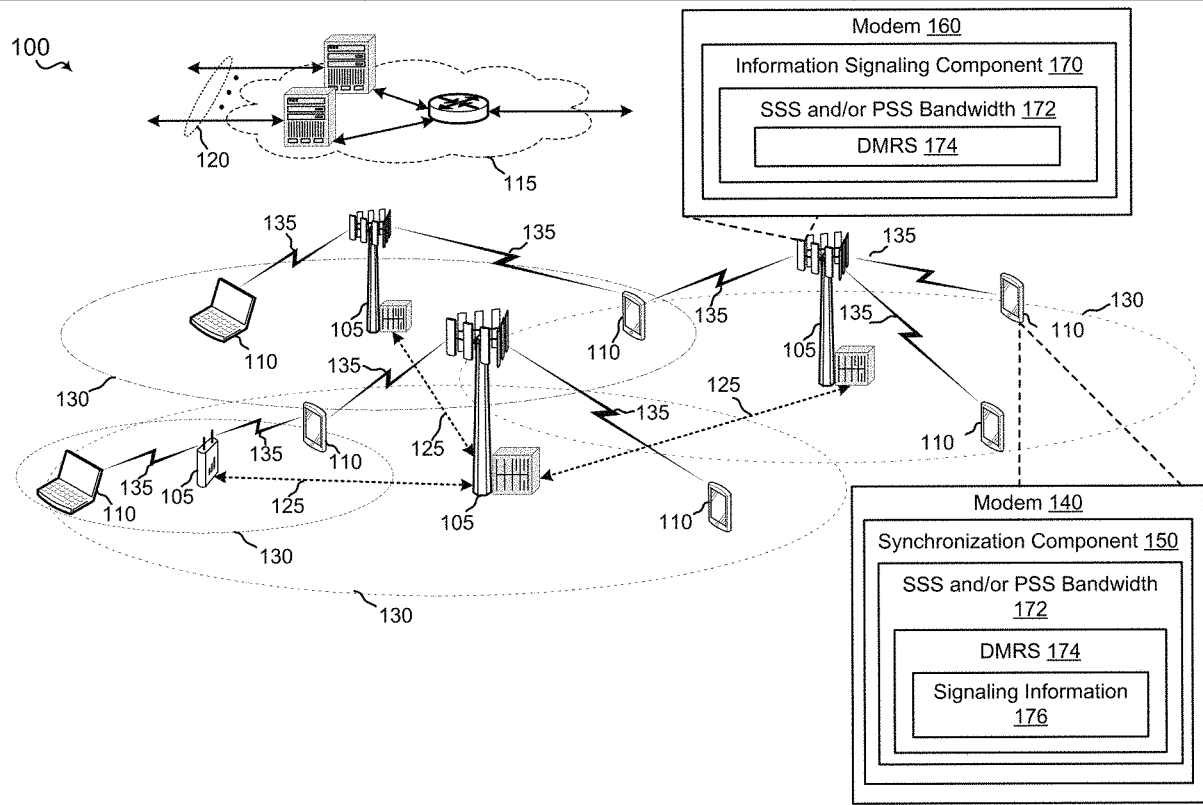
2018-12-20

Abstract

(EP3639442)

The present disclosure relates to signaling information in physical broadcast channel (PBCH) demodulation reference signals (DMRS). In one example, a network entity may transmit the signaling information carried by a DMRS in one or more resource elements of physical broadcast channel (PBCH) symbols within a bandwidth of a primary synchronization signal and a secondary synchronization signal of a synchronization signal block. In another example, a user equipment (UE) may receive the signaling information carried by the DMRS within one or more resource elements of PBCH symbols within a bandwidth of a primary synchronization signal and a secondary synchronization signal of a synchronization signal block on a broadcast channel from the network entity.

Images



Family 17/20 - FAMPAT - ©Questel

Title

(WO2016182363)

Method for reporting channel state in wireless communication system and apparatus therefor

Publication numbers

US10469236

US20180097603

WO2016/182363

Publication dates

2019-11-05

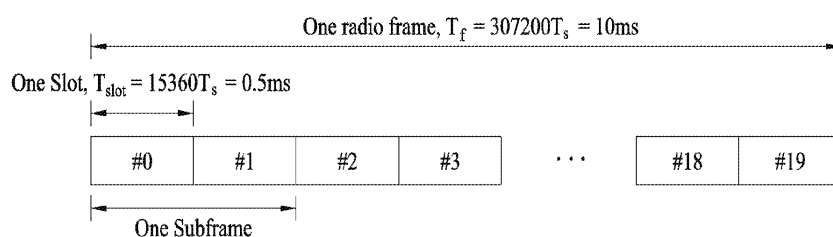
2018-04-05

2016-11-17

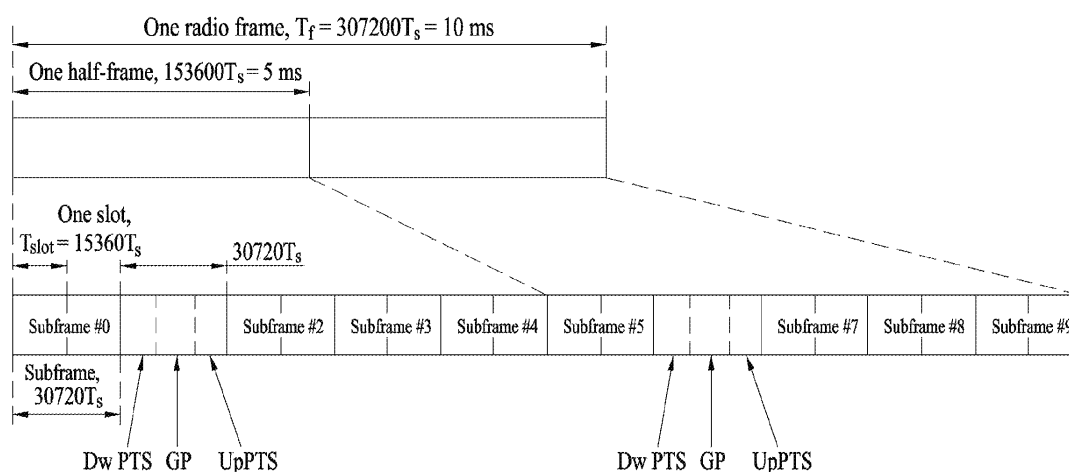
Abstract

(WO2016/182363)

A method by which a terminal reports an aperiodic channel state in a wireless communication system, according to one embodiment of the present invention, comprises the steps of: receiving an aperiodic channel state information (CSI) report request from a base station; and calculating the aperiodic CSI with respect to a CSI to be measured, which is indicated by the aperiodic CSI report request so as to transmit the calculated aperiodic CSI to the base station, wherein the aperiodic CSI report request indicates a report for one of a plurality of aperiodic CSI report sets, and the number of individual CSI reports included in each of the plurality of aperiodic CSI report sets can be independently set according to each aperiodic CSI report set.

Images

(a)



(b)

Family 18/20 - FAMPAT - ©Questel

Title

(EP3365986)

Method and apparatus for defining wideband cqi in wireless communication system

Publication numbers

US10728784

EP3365986

US20190215710

EP3365986

EP3365986

WO2017/069593

Publication dates

2020-07-28

2020-06-03

2019-07-11

2019-06-26

2018-08-29

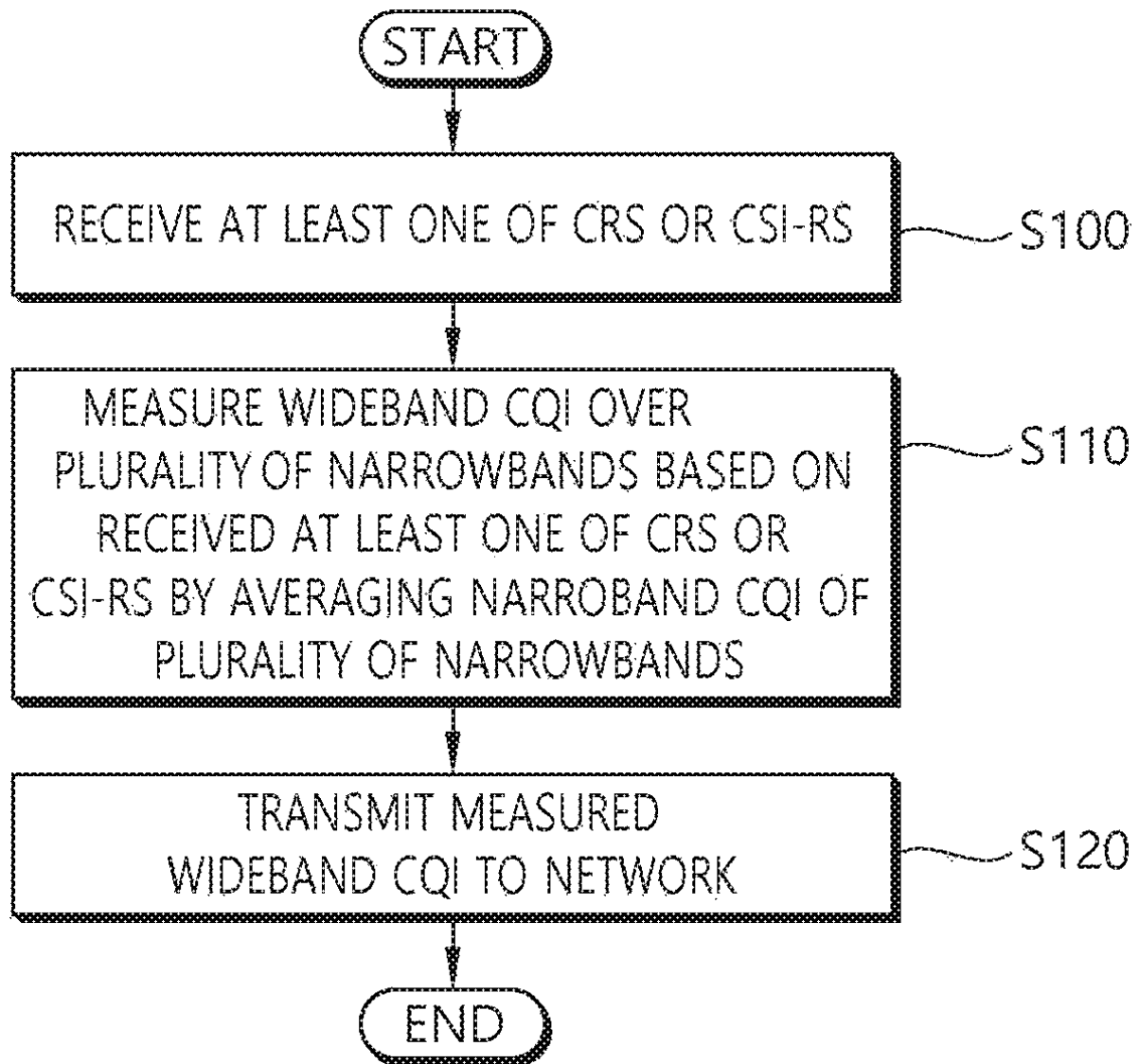
2017-04-27

Abstract

(EP3365986)

A method and apparatus for measuring a channel quality indicator (CQI) in a wireless communication system is provided. A machine-type communication user equipment (MTC UE) receives at least one of a cell-specific reference signal (CRS) or a channel state information reference signal (CSI-RS) from a network, measures a wideband CQI over plurality of narrowbands based on the received CRS or CSI-RS by averaging narrowband CQIs of the plurality of narrowbands, and transmits the measured wideband CQI to the network.

Images



Family 19/20 - FAMPAT - ©Questel

Title

(EP3626002)

Techniques and apparatuses for reusing remaining minimum system information configuration bits to signal a synchronization signal block location

Publication numbers

CN110651510

JP2020520192

KR10-2125179

BR112019024025

CN111106895

EP3626002

CN110651510

KR10-2019-0142349

BR112019024025

KR10-2019-0130048

IN201947042317

US10270573

TW201902274

CA3061369

US20180337755

WO2018/213026

Publication dates

2020-09-11

2020-07-02

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2019-12-26

2019-11-26

2019-11-20

2019-11-08

2019-04-23

2019-01-01

2018-11-22

2018-11-22

2018-11-22

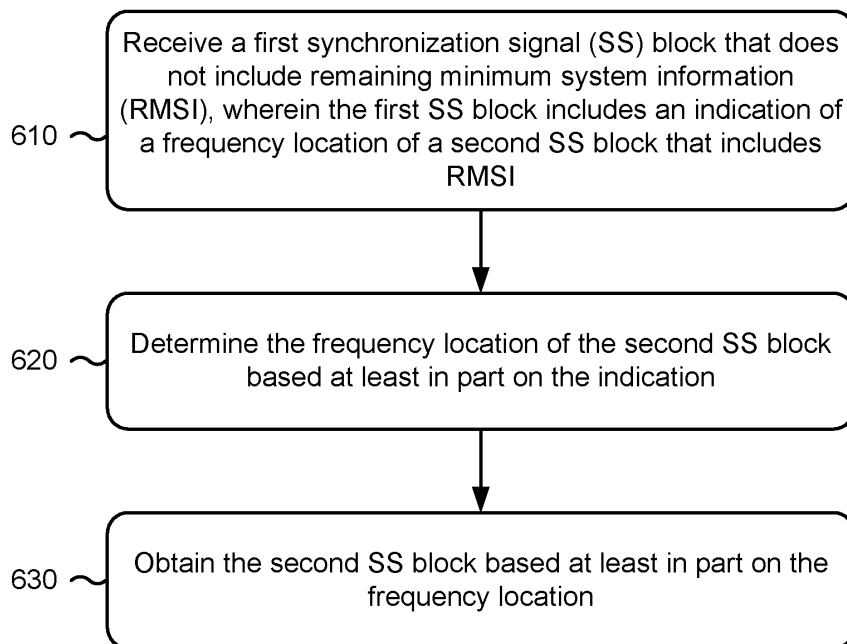
Abstract

(EP3626002)

Various aspects of the present disclosure generally relate to wireless communication. In some aspects, a user equipment (UE) may receive a first synchronization signal (SS) block that does not include remaining minimum system information (RMSI). The first SS block may indicate an offset for obtaining a second SS block that includes RMSI. The UE may determine a location of the second SS block based at least in part on the offset. Numerous other aspects are provided.

Images

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Title

(US20200187214)

System and method for spectrum sharing and interference management between wireless systems

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Abstract

(US20200187214)

A method of allocating resources in a first wireless system, wherein the first wireless system shares a frequency spectrum with a second wireless system, is described. The method comprises detecting a level of interference to the second wireless system caused by the first wireless system on a first frequency within the spectrum; determining if transmission on the first frequency should be restricted based on the level of interference; and restricting transmissions in the first system on the first frequency if it was determined that transmission on the first frequency should be restricted while allowing normal use of the remaining portions of the frequency spectrum to continue in the first system. A system for allocating resources in a first wireless system, wherein the first wireless system shares a frequency spectrum with a second wireless system, is also described.

Images

