

Nicolas Vargas

1) Family number: 56489007 (US2015280883A)

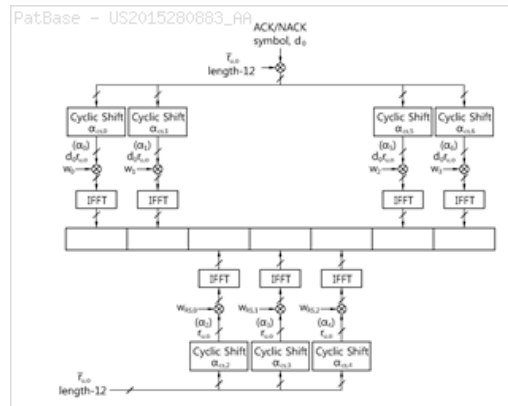
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Title: METHOD FOR OPERATING TERMINAL IN CARRIER AGGREGATION SYSTEM, AND APPARATUS USING SAID METHOD

Abstract: Provided are a method for operating a terminal in a carrier aggregation system and an apparatus using said method. Downlink control information (DCI) including a downlink assignment index (DAI) is received via an enhanced physical downlink control channel (E-PDCCH). The DCI received via the E-PDCCH includes an additional field which does not exist in the DCI received via a physical downlink control channel (PDCCH). If the DAI value is larger than 1, the additional field is used in selecting one of a plurality of PUCCH resources set by the upper layer, and the one resource is used in transmitting ACK/NACK.

Classifications:

International (IPC 8-9): H04B1/707 H04J11/00 H04J13/00 H04L1/18
H04L5/00 H04W4/00 H04W52/04 H04W52/34
H04W72/04 (Advanced/Invention);
H04B1/707 H04J13/00 H04W52/34 (Advanced/Non-invention)
CPC: H04B1/707 H04J13/004 H04L1/1861 H04L5/001 H04L5/0053
H04W52/34 H04W72/0413 H04W72/042 H04L5/0055
US: 370/329



Family:

Publication number	Publication date	Application number	Application date
CN104782208 A	20150715	CN201380059596	20131114
CN104782208 B	20180720	CN201380059596	20131114
EP2922357 A1	20150923	EP20130855944	20131114
EP2922357 A4	20160713	EP20130855944	20131114
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KR20150089002 A	20150804	KR20157012020	20131114
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US9848418 BB	20171219	US20160353358	20161116
US10187883 BB	20190122	US20170817943	20171120
WO14077607 A1	20140522	WO2013KR10361	20131114

Priority:

US20120726517P 20121114 US20130440057 20131114 WO2013KR10361 20131114
US20150440057 20150430 US20160353358 20161116 US20170817943 20171120

Probable Assignee: LG ELECTRONICS INC

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Inventor(s): (std): AHN JOON KUI ; AHN JOONKUI ; CHAE HYUK JIN ; CHAE HYUKJIN ; KIM HAK SEONG ; KIM HAKSEONG ;
SEO DONG YOUN ; SEO DONGYOUN ; SEO HAN BYUL ; SEO HANBYUL

Agent(s): FRENKEL MATTHIAS ALEXANDER; LEE HONG DEGERMAN KANG WAIMEY; 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
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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
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2) Family number: 52370024 (US2014029565A)

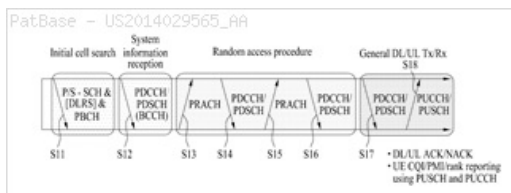
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Title: METHOD FOR TRANSMITTING/RECEIVING DATA IN WIRELESS ACCESS SYSTEM, AND BASE STATION AND USER
EQUIPMENT FOR SAME

Abstract: The present invention discloses a method for transmitting/receiving data in a wireless access system supporting carrier aggregation/multiple cells, and a base station and a user equipment for same. More particularly, the method comprises the following steps: transmitting downlink control information through a physical downlink control channel (PDCCH) for scheduling downlink data from a first subframe; and transmitting the downlink data, which is scheduled by the downlink control information from a second subframe, through a physical downlink shared channel (PDSCH), wherein the downlink control information includes a field indicating the second subframe from which the downlink data is transmitted.

Classifications:

International (IPC 8-9): H04B7/26 H04J11/00 H04L5/00
H04W72/12 (Advanced/Invention);
H04W72/04 (Advanced/Non-invention)
CPC: H04W72/1294 H04L5/001 H04L5/0035 H04L5/0053 H04L5/0073
H04L5/0094 H04W72/042
US: 1/1 370/329



Family:

Publication number	Publication date	Application number	Application date
DE602012020790 D1	20160901	DE201260020790T	20120514
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EP2709300 A4	20141126	EP20120782048	20120514
EP2709300 B1	20160720	EP20120782048	20120514
US2014029565 AA	20140130	US20120111731	20120514
US9173231 BB	20151027	US20120111731	20120514
WO12154014 A2	20121115	WO2012KR03762	20120514
WO12154014 A3	20130103	WO2012KR03762	20120514

Priority:

US20110485573P 20110512 EP20120782048 20120514 WO2012KR03762 20120514
US20120111731 20120514

Probable Assignee: LG ELECTRONICS INC

Assignee(s): (std): HAN SEUNGHEE ; KIM JINMIN ; LEE HYUNWOO ; LG ELECTRONICS INC

Inventor(s): (std): HAN SEUNGHEE ; KIM JINMIN ; LEE HYUNWOO

Agent(s): TER MEER STEINMEISTER AND PARTNER PATENTANWALTE MBB; URNER PETER; TER MEER STEINMEISTER AND PARTNER; LEE HONG DEGERMAN KANG AND WAIMEY; KIM YONG IN ET AL

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

3) Family number: 52330095 (US2014071929A)

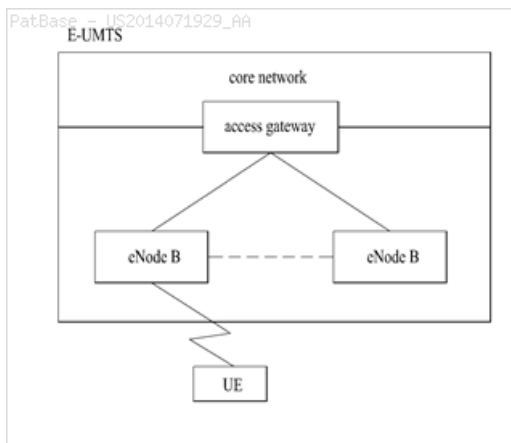
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Title: METHOD FOR TRANSMITTING/RECEIVING DOWNLINK CONTROL INFORMATION IN WIRELESS COMMUNICATION SYSTEM AND DEVICE THEREFOR

Abstract: Disclosed in the present invention is a method for a terminal to receive a downlink signal from a base station in a wireless communication system. More particularly, the present invention comprises the steps of: receiving downlink control information from the base station in a data region of a first subframe; and receiving downlink data in a data region of a second subframe, on the basis of the downlink control information, wherein the second subframe is a subframe available after a preset number of subframes from the first subframe.

Classifications:

International (IPC 8-9): H04B7/26 H04J11/00 H04L5/00
H04W72/04 (Advanced/Invention)
CPC: H04L5/0085 H04L5/001 H04L5/0037 H04L5/0048 H04L5/0053
H04W72/042
US: 1/1 370/329



Family:

Publication number	Publication date	Application number	Application date
EP2706678 A2	20140312	EP20120779433	20120501
EP2706678 A4	20150107	EP20120779433	20120501
US2014071929 AA	20140313	US20120115038	20120501
US9467272 BB	20161011	US20120115038	20120501
WO12150793 A2	20121108	WO2012KR03388	20120501
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Priority:

US20110482204P 20110503 US20120115038 20120501 WO2012KR03388 20120501

Probable Assignee: LG ELECTRONICS INC

Assignee(s): (std): KIM HAKSEONG ; LG ELECTRONICS INC ; SEO HANBYUL ; SEO INKWON

Inventor(s): (std): SEO INKWON ; SEO HANBYUL ; KIM HAKSEONG

Agent(s): KATERLE AXEL; BIRCH STEWART KOLASCH AND BIRCH LLP; KIM YONG IN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT

4) Family number: 46986250 (US2012008588A)

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Title: METHOD FOR TRANSMITTING SOUNDING REFERENCE SIGNALS IN A WIRELESS COMMUNICATION SYSTEM, AND APPARATUS FOR SAME

Abstract: The present invention relates to a method in which a user equipment transmits a plurality of sounding reference signals to a base station in a wireless communication system. More particularly, the method comprises the steps of: generating a plurality of sounding reference signals on the basis of repetition factors (RPFs) corresponding to the number of transmitting antennas; multiplexing the plurality of sounding reference signals to a frequency domain in the same OFDM symbol or SC-FDMA symbol on the basis of a transmitting antenna index; and transmitting the multiplexed sounding reference signals to the base station using a plurality of transmitting antennas.

Classifications:

International (IPC 8-9): G01R31/08 H04B7/04 H04B7/06 H04B7/26 H04J11/00 H04J11/00 H04J13/00 H04J13/22 H04J3/00 H04J3/06 H04J99/00 H04L1/00 H04L1/16 H04L12/26 H04L25/02 H04L27/26 H04L27/28 H04L29/02 H04L29/06 H04L5/00 H04L5/06 H04L5/14 H04Q7/00 H04Q7/24 H04W24/00 H04W24/02 H04W24/10 H04W4/00 H04W48/12 H04W56/00 H04W72/00 H04W72/04 H04W72/12 H04W72/14 H04W76/04 H04W88/00 H04W88/02 H04W92/00 (Advanced/Invention); H04B7/26 H04J11/00 H04J13/00 H04L1/00 H04L1/16 H04W24/10 H04W48/12 H04W72/00 H04W72/04 H04W72/12 H04W88/02 H04W92/00 (Advanced/Non-invention); H04B7/04 H04J11/00 H04L27/26 (Core/Invention)

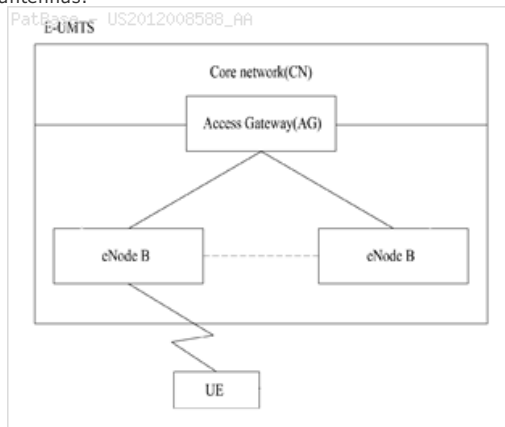
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European: H04B7/06C H04B7/06C6 H04B7/06H2S H04B7/26T10 H04L5/00A2A1 H04L5/00A2A11 H04L5/00A3C H04L5/00C5 H04L5/00E H04W24/00 H04W72/12D2 T04J13/00B9 T04L1/00A9B T04L1/16F15 T04W24/10 T04W48/12 T04W56/00 T04W72/00 T04W72/04F4 T04W72/04H4 T04W72/12

US: 1/1 370/206 370/210 370/236 370/252 370/252P 370/280 370/328 370/329 370/329P 370/331 370/336 370/336P 370/338 370/474 370/503 455/403

JP F-Term: 5K004 5K022 5K067 5K067/CC01 5K067/DD25 5K067/EE02 5K067/EE10 5K067/EE22 5K067/GG01 5K067/JJ13 5K067/EE71 5K067/AA21 5K067/BB21 5K067/CC06 5K067/AA13 5K067/GG03 5K042

JP F-Index: H04J11/00/Z H04J13/00/230 H04J13/22 H04L27/26/113 H04L27/26/114 H04Q7/00/547 H04Q7/00/549 H04Q7/00/551 H04Q7/00/564 H04W72/04/132 H04W72/04/133 H04W72/04/134 H04W72/04/136 H04W72/14 H04L27/26/100 H04Q7/00/546 H04W72/04/131 H04J11/00 H04J99/00 H04B17/309 H04Q7/00/241 H04Q7/00/548 H04W24/02 H04Q7/00/544 H04W72/04/111

**Family:**

Publication number	Publication date	Application number	Application date
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Priority:

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EP20110750963	20110307	US20110509493	20110307	US20110509486	20110307
WO2011KR01546	20110307	WO2011KR01548	20110307	US20110258428	20110921
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US20140316641	20140626	US20140460474	20140815	US20140460969	20140815
US20140567909	20141211	US20150960064	20151204	US20150961518	20151207
US20150986282	20151231	US20170592479	20170511	US20180946344	20180405

Probable Assignee: LG ELECTRONICS INC

Assignee(s): (std): CHUNG JAE HOON ; HAN SEUNG HEE ; KWON YEONG HYE0 ; KWON YEONG HYEON ; LG ELECTRONICS INC ; NOH MIN SEOK ; LEE MOON IL ; MOON SUNG HO ; LEE MOON II ; NOH MIN SEO ; MOON SEONG HO

Inventor(s): (std): LEE MOON II ; HO MOON SUNG ; NOH MIN SEO ; KWON YEONG HYE0 ; IL LEE MOON ; HOON CHUNG JAE ; HEE HAN SEUNG ; HYEON KWON YEONG ; SEOK NOH MIN ; MOON SUNG HO ; LEE MOON IL ; CHUNG JAE HOON ; NOH MIN SEOK ; KWON YEONG HYEON ; HAN SEUNG HEE

Inventor(s): SEUNG HEE HAN ; MIN SEOK NOH ; JAE HOON CHUNG

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FPA PATENT ATTORNEYS PTY LTD; SMART AND BIGGAR; CABINET PLASSERAUD; KESERIS DENIS; BIRCH STEWART KOLASCH AND BIRCH LLP; LEE HONG DEGERMAN KANG AND WAIMEY; KIM YONG IN ET AL; YANG MOON OCK

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

5) Family number: 56967306 (US2015327225A)

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Title: METHOD FOR SENDING CONTROL INFORMATION, BASE STATION, AND USER EQUIPMENT

Abstract: Disclosed are a method for sending control information, a base station, and a user equipment (UE). Taking implementation of the method as an example, the method comprises: a base station determining a first subframe and a second subframe, wherein the first subframe is a subframe having a control region, and the second subframe is a subframe with no control region; and the base station sending control information to a UE in the control region of the first subframe, and sending a data signal and/or an enhanced physical downlink control channel (ePDCCH) on the second subframe to the

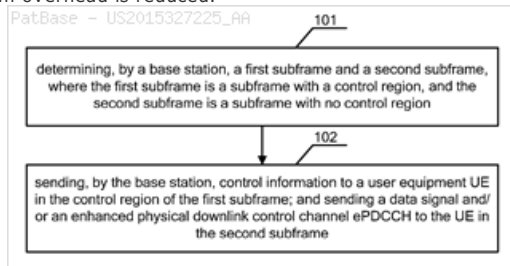
UE. By means of this solution, the first subframe has a control region, the second subframe does not have a control region, and not all the subframes have a control region; therefore, the system overhead is reduced.

Classifications:

International (IPC 8-9): H04L1/00 H04L12/24 H04L5/00 H04W28/06 H04W28/16 H04W72/04 H04W88/00 (Advanced/Invention); H04W48/08 (Advanced/Non-invention)

CPC: H04W72/042 H04L41/12 H04L5/0007 H04W88/02 H04W28/06

US: 370/329



Family:

Publication number	Publication date	Application number	Application date
CN104170300 A	20141126	CN201380001978	20130315
CN104170300 B	20180821	CN201380001978	20130315
EP2947798 A1	20151125	EP20130872222	20130315
EP2947798 A4	20160113	EP20130872222	20130315
IN02633KN2015 A	20160624	IN2015KN02633	20150811
US2015327225 AA	20151112	US20150802899	20150717
WO14110793 A1	20140724	WO2013CN70686	20130118
WO14110865 A1	20140724	WO2013CN072694	20130315

Priority:

WO2013CN070686 20130118 CN201380001978 20130315 WO2013CN072694 20130315

Probable Assignee: HUAWEI TECHNOLOGIES CO LTD

Assignee(s): (std): HUAWEI TECH CO LTD

Assignee(s): HUAWEI TECHNOLOGIES CO ; HUAWEI TECHNOLOGIES CO LTD

Inventor(s): (std): FAN XIAOAN ; GUAN LEI ; LI QIANG ; MA SHA ; XIA LIANG ; XIA YUAN

Agent(s): ISARPATENT; SHENPAT INTELLECTUAL PROPERTY AGENCY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW 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: 55374344 (US2015092762A)

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Title: METHOD, DEVICE, AND COMMUNICATION SYSTEM FOR TRANSMISSION CONTROL

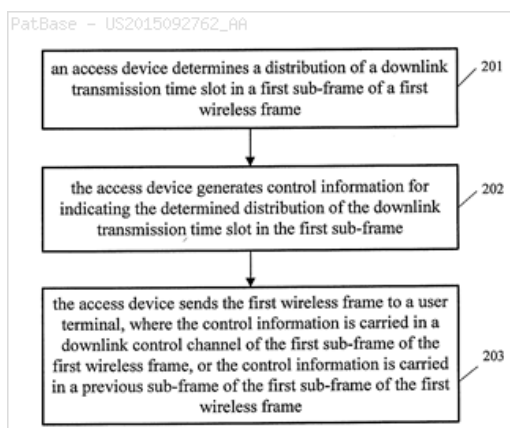
Abstract: A transmission control method may include: determining, by an access device, a distribution of a downlink transmission time slot in a first subframe of a first wireless frame, where the first subframe is a special subframe in a case that the first wireless frame has a first configuration periodicity, or the first subframe is a downlink subframe in a case that the first wireless frame has a second configuration periodicity; generating, by the access device, control information for indicating the determined distribution of the downlink transmission time slot in the first subframe; and sending, by the access device, the first wireless frame to a user terminal, where the control information is carried in a downlink control channel of the first subframe of the first wireless frame, or the control information is carried in a previous subframe of the first subframe of the first wireless frame.

Classifications:

International (IPC 8-9): H04W72/04 H04W74/04 (Advanced/Invention)

CPC: H04W72/0446 H04W72/042

US: 370/336



Family:

Publication number	Publication date	Application number	Application date
CN103517421 A	20140115	CN201210197939	20120615
CN103517421 B	20170627	CN201210197939	20120615
EP2863697 A1	20150422	EP20130804557	20130608
EP2863697 A4	20150603	EP20130804557	20130608
US2015092762 AA	20150402	US20140567550	20141211
US9615367 BB	20170404	US20140567550	20141211
WO13185576 A1	20131219	WO2013CN076984	20130608

Priority:

CN201210197939 20120615 WO2013CN076984 20130608 WO2013CN76984 20130608

Probable Assignee: HUAWEI TECHNOLOGIES CO LTD

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

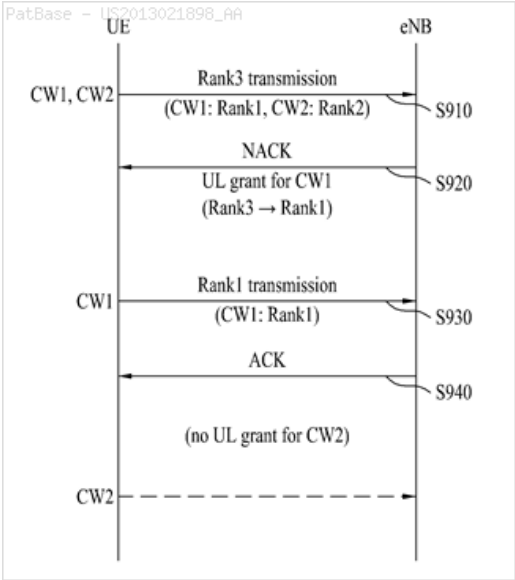
7) Family number: 49889367 (US2013021898A) © PatBase

Title: METHOD AND APPARATUS FOR UPLINK MULTIPLE INPUT MULTIPLE OUTPUT (MIMO) TRANSMISSION

Abstract: The present description relates to a wireless communication system, and more particularly, to a method and apparatus for uplink multiple input multiple output (MIMO) transmission. A method for performing an uplink MIMO transmission according to one embodiment of the present invention comprises the following steps: transmitting, from a first subframe, a first data block and a second data block through a first HARQ process and a second HARQ process, respectively; receiving, at a second subframe, uplink scheduling control information on the first data block and control information which indicates inactivation of the second data block; setting HARQ feedback information on the second data block to an ACK state; and performing retransmission of the first data block from a third subframe on the basis of the uplink scheduling control information on the first data block. Retransmission of the second data block may not be performed until uplink scheduling control information on the second data block is received.

Classifications:

International (IPC 8-9): H04B7/04 H04J11/00 H04L1/00 H04L1/18 H04L25/03 H04W72/04 H04W8/30 (Advanced/Invention); H04B7/06 H04W8/30 (Advanced/Non-invention)
CPC: H04B7/0417 H04B7/0404 H04B7/0486 H04B7/0623 H04L1/0061 H04L1/1822 H04L1/1861 H04L1/1864 H04L1/1887 H04L1/1893 H04L25/03929
European: H04B7/04A H04B7/04M1 H04L1/18H H04L1/18T7 T04B7/06C1F1A
US: 1/1 370/216



Family:

Publication number	Publication date	Application number	Application date
US2013021898 AA	20130124	US20110638775	20110427
US9287942 BB	20160315	US20110638775	20110427
WO11136554 A2	20111103	WO2011KR03076	20110427
WO11136554 A3	20120209	WO2011KR03076	20110427

Priority:

US20100328631P 20100427 US20110638775 20110427 WO2011KR03076 20110427

Probable Assignee: LG ELECTRONICS INC

Assignee(s): (std): KANG BYEONG WOO ; KIM BONG HOE ; LEE DAE WON ; LG ELECTRONICS INC ; NOH YU JIN ; ROH DONG WOOK ; SEO DONG YOUN
Inventor(s): (std): KANG BYEONG WOO ; KIM BONG HOE ; LEE DAE WON ; NOH YU JIN ; ROH DONG WOOK ; SEO DONG YOUN
Agent(s): DENTONS US LLP; KIM YONG IN 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 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

8) Family number: 50913392 (US2012087321A) © PatBase

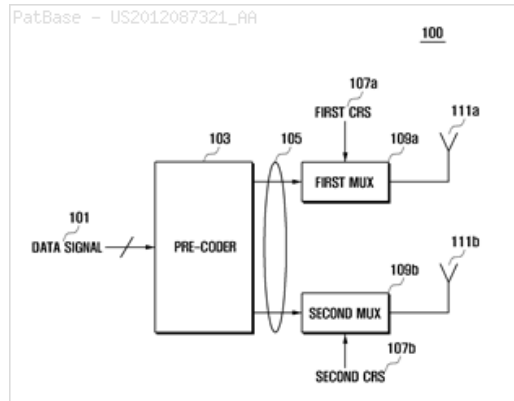
Title: METHOD AND APPARATUS FOR TRANSMITTING AND RECEIVING DATA

Abstract: A transmission scheme newly adds a Demodulation Reference Signal (DM-RS) to estimate a channel response for demodulation. When a transmission scheme based on Long Term Evolution Common Reference Signal (LTE CRS) is set in a user, a corresponding user cannot receive data in a Multimedia Broadcast Multicast Service Single Frequency Network (MBSFN) sub-frame. To solve this problem, the present scheme separates and sets a transmission mode for sub-frame and a transmission mode for MBSFN.

Classifications:

International (IPC 8-9): H04L25/02 H04L27/00 H04L27/26 H04L5/00 H04W24/00 H04W28/22 H04W4/00 H04W4/06 H04W72/04 (Advanced/Invention);

H04L25/02 H04L5/00 (Advanced/Non-invention)
CPC: H04W4/06 H04L25/0224 H04W28/22 H04L5/005 H04L5/0051
H04L5/0058 H04L27/2602 H04L5/0053 H04L5/0094
European: H04L5/00C5A H04L5/00C5B
US: 370/312 370/329 370/329P 370/336



Family:

Publication number	Publication date	Application number	Application date
EP2625898 A2	20130814	EP20110830924	20111006
EP2625898 A4	20140514	EP20110830924	20111006
EP2625898 B1	20181205	EP20110830924	20111006
EP3413498 A1	20181212	EP20180185675	20111006
KR101780503 B1	20170921	KR20100097291	20101006
KR20120035642 A	20120416	KR20100097291	20101006
US2012087321 AA	20120412	US20110267402	20111006
US2015085737 AA	20150326	US20140559441	20141203
US2018249300 AA	20180830	US20180966571	20180430
US8976746 BB	20150310	US20110267402	20111006
US9986388 BB	20180529	US20140559441	20141203
WO12047039 A2	20120412	WO2011KR07410	20111006
WO12047039 A3	20120607	WO2011KR07410	20111006

Priority:

KR20100097291 20101006 EP20110830924 20111006 WO2011KR07410 20111006
US20110267402 20111006 US20140559441 20141203 US20180966571 20180430

Probable Assignee: UNWIRED PLANET INT LTD

Assignee(s): (std): HAN JIN KYU ; KIM YOUN SUN ; SAMSUNG ELECTRONICS CO LTD ; UNWIRED PLANET INT LTD

Assignee(s): SAMSUNG ELECTRONICS CO

Inventor(s): (std): HAN JIN KYU ; KIM YOUN SUN

Agent(s): NEDERLANDSCH OCTROOIBUREAU; FARRELL LAW FIRM PC; YOON DONG YOL

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 KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

9) Family number: 50172397 (US2011310789A)

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Title: METHOD OF UPLINK CONTROL CHANNEL ALLOCATION FOR A RELAY BACKHAUL LINK

Abstract: The present invention provides a method for uplink control channel allocation for a relay backhaul link. Embodiments of the method include allocating resource blocks in a subframe for a backhaul downlink control channel between an access node and a relay station. The resource blocks are allocated from a first portion of the subframe that is different than a second portion of the subframe allocated to a downlink control channel between the relay station and at least one access terminal. Embodiments of the method also include transmitting control information from the access node in the resource blocks.

Classifications:

International (IPC 8-9): H04B7/14 H04B7/15 H04L5/00 H04W16/26 H04W72/04 (Advanced/Invention)

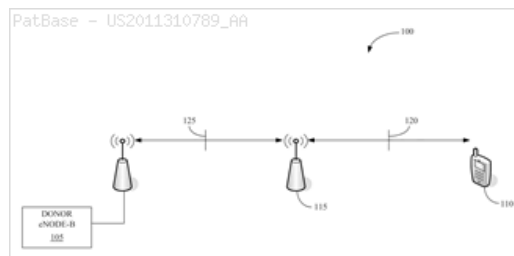
CPC: H04L5/0005 H04L5/0053 H04W84/047

European: H04L5/00A2A H04L5/00C6 H04W72/04N T04W84/04C4

US: 370/315 370/315P

JP F-Term: 5K067/5K067/AA22 5K067/AA23 5K067/BB04 5K067/BB21 5K067/CC02 5K067/CC05 5K067/CC06 5K067/EE02 5K067/EE06 5K067/EE10 5K067/EE64 5K067/EE65 5K067/HH24 5K067/JJ34 5K067/JJ35

JP F-Index: H04W16/26 H04W72/04/133 H04W72/04/136



Family:

Publication number	Publication date	Application number	Application date
BR112012032523 A2	20161122	BR20121132523	20110615
CN103109472 A	20130515	CN201180030565	20110615
EP2583387 A1	20130424	EP20110728467	20110615
IN10427CN2012 A	20140613	IN2012CN10427	20121214
JP2013533690 T2	20130822	JP20130516611T	20110615
KR101419284 B1	20140718	KR20127033417	20110615
KR20130023279 A	20130307	KR20127033417	20110615
US2011310789 AA	20111222	US20110042797	20110308
WO11163021 A1	20111229	WO2011US40457	20110615

Priority:

US20100356897P 20100621 US20110042797 20110308 WO2011US40457 20110615

Probable Assignee: WSOU INVESTMENTS LLC**Assignee(s):** (std): ALCATEL LUCENT USA INC ; BAKER MATTHEW ; CHENG FANG CHEN ; HU TECK ; ALCATEL LUCENT**Assignee(s):** ALCATEL LUCENT TECHNOLOGIES USA INC ; ALCATEL LUCENT TELECOM LTD ; CREDIT SUISSE AG ; OMEGA CREDIT OPPORTUNITIES MASTER FUND LP ; WSOU INVESTMENTS LLC**Inventor(s):** (std): BAKER MATTHEW ; CHENG FANG CHEN ; HU TECK**Inventor(s):** TECK HU ; MATTHEW BAKER ; FANG CHEN CHENG**Agent(s):** DREISS; YOSHIZAWA HIROSHI; OKABE YUZURU**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**10) Family number: 57188419 (US2015382326A)**

© PatBase

Title: METHOD FOR SETTING SEARCH AREA FOR DETECTING DOWNLINK CONTROL INFORMATION IN WIRELESS COMMUNICATION SYSTEM AND APPARATUS FOR SAME

Abstract: Disclosed in the present application is a method for user equipment receiving a control channel from a base station in a wireless communication system. More particularly, the method comprises a step of monitoring control channel candidates in a search area on a first subframe, and receiving the control channel including control information corresponding to each of one or more subframes, beginning with a predetermined number of subframes from the first subframe, wherein when the one or more subframes are provided in a plurality, the control channel candidates are sorted according to the control information corresponding to each of the plurality of subframes.

Classifications:**International (IPC 8-9):** H04J11/00 H04L5/00 H04W24/00

H04W48/16 H04W72/04 (Advanced/Invention);

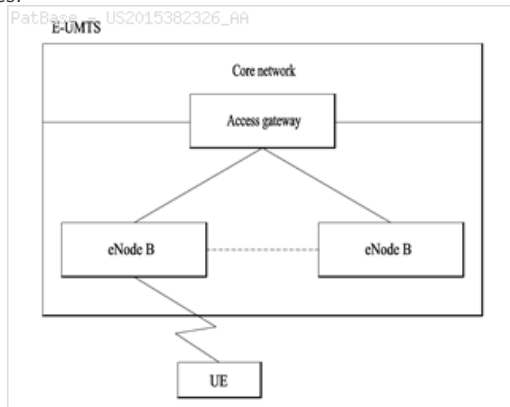
H04L5/00 H04W88/02 H04W88/08 (Advanced/Non-invention)

CPC: H04W72/042 H04W72/0446 H04W88/02 H04W88/08

H04L5/0053 H04W48/16 H04L5/0007

US: 370/329**JP F-Term:** 5K067 5K067/AA15 5K067/DD34 5K067/EE02

5K067/EE10

JP F-Index: H04W72/04/131 H04W72/04/133 H04W72/04/136**Family:**

Publication number	Publication date	Application number	Application date
CN104969493 A	20151007	CN201480007540	20140123
CN104969493 B	20180327	CN201480007540	20140123
DE602014030475 D1	20180913	DE201460030475T	20140123
EP2955864 A1	20151216	EP20140748669	20140123
EP2955864 A4	20160907	EP20140748669	20140123
EP2955864 B1	20180815	EP20140748669	20140123
JP2016508685 T2	20160322	JP20150555099T	20140123
JP6097846 B2	20170315	JP20150555099T	20140123
US2015382326 AA	20151231	US20140763418	20140123
US9839023 BB	20171205	US20140763418	20140123
WO14123316 A1	20140814	WO2014KR00664	20140123

Priority:

US20130761694P 20130206 EP20140748669 20140123 WO2014KR00664 20140123

US20140763418 20140123

Probable Assignee: LG ELECTRONICS INC**Assignee(s):** (std): LG ELECTRONICS INC**Inventor(s):** (std): SEO HANBYUL ; SEO INKWON ; YI YUNJUNG**Agent(s):** TER MEER STEINMEISTER AND PARTNER PATENTANWALTE MBB; TER MEER STEINMEISTER AND PARTNER; BIRCH STEWART KOLASCH AND BIRCH LLP; KIM YONG IN 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**11) Family number: 51897439 (US2013315135A)**

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Title: METHOD AND DEVICE FOR SETTING BACKHAUL LINK SUBFRAME IN WIRELESS COMMUNICATION SYSTEM HAVING CARRIER AGGREGATION TECHNIQUE APPLIED THERETO

Abstract: Disclosed in the present invention is a method for a base station to set a backhaul link subframe for a relay node in a wireless communication system, to which a carrier aggregation technique is applied. More particularly, the present invention comprises the steps of: determining one of the plurality of subframe settings as a first subframe setting for a main

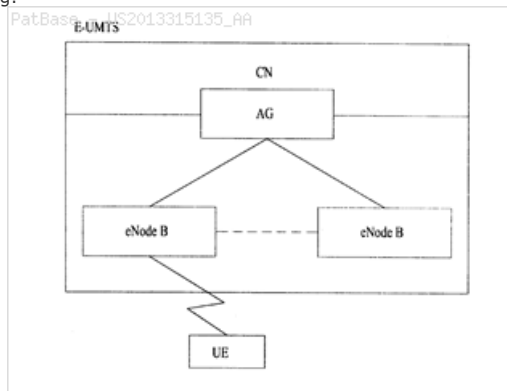
component carrier allocated to the relay node; composing subframe setting candidates for one or more subcomponent carriers allocated to the relay node, one the basis of the determined first subframe setting; and determining a second subframe setting for each of the one or more subcomponent carriers, using the composed subframe setting candidates, wherein a subframe aggregation according to the first subframe setting and subframe aggregations according to each of the subframe setting candidates do not overlap when downlink subframes and uplink subframes of the different component carriers are identical, and a downlink subframe aggregation according to the second subframe setting is included in a downlink subframe aggregation according to the first subframe setting.

Classifications:

International (IPC 8-9): H04B7/14 H04J11/00 H04L1/16 H04L1/18 H04L5/00 H04L5/14 H04W72/04 H04W84/04 (Advanced/Invention); H04L1/00 (Advanced/Non-invention)

CPC: H04L1/1854 H04L5/001 H04L5/0055 H04L5/0092 H04L5/1469 H04L2001/0093 H04L2001/0097 H04W84/047 H04L1/1678 H04L5/0053 H04W72/0406

US: 1/1 370/280 370/315



Family:

Publication number	Publication date	Application number	Application date
CN103503342 A	20140108	CN201280011186	20120229
CN103503342 B	20160504	CN201280011186	20120229
CN105827375 A	20160803	CN201610235774	20120229
US2013315135 AA	20131128	US20120983745	20120229
US2014036740 AA	20140206	US20130049000	20131008
US2015333873 AA	20151119	US20150810011	20150727
US2016164642 AA	20160609	US20160046119	20160217
US9083497 BB	20150714	US20120983745	20120229
US9130720 BB	20150908	US20130049000	20131008
US9281921 BB	20160308	US20150810011	20150727
US9602249 BB	20170321	US20160046119	20160217
WO12121509 A2	20120913	WO2012KR01535	20120229
WO12121509 A3	20121220	WO2012KR01535	20120229

Priority:

US20110449098P 20110304	US20110499098P 20110304	CN201280011186 20120229
US20120983745 20120229	WO2012KR01535 20120229	US20130983745 20130805
US20130049000 20131008	US20150810011 20150727	US20160046119 20160217

Probable Assignee: LG ELECTRONICS INC

Assignee(s): (std): KIM HAKSEONG ; LEE SEUNGMIN ; LG ELECTRONICS INC ; SEO HANBYUL

Assignee(s): L G ELECTRONICS INC

Inventor(s): (std): LEE SEUNG MIN ; KIM HAKSEOUNG ; SEO HANBYUL ; LEE SEUNGMIN ; KIM HAKSEONG

Agent(s): MCKENNA LONG AND ALDRIDGE LLP; DENTONS US LLP; KIM YONG IN 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

12) Family number: 51892610 (US2013336198A)

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Title: METHOD AND APPARATUS FOR TRANSMITTING AND RECEIVING A SIGNAL THROUGH A RELAY NODE IN A WIRELESS COMMUNICATION SYSTEM IN WHICH A CARRIER AGGREGATION METHOD IS APPLIED

Abstract: The present invention relates to a method for transmitting and receiving a signal, using a macro base station, through a relay node in a wireless communication system in which a carrier aggregation method is applied. Specifically, the method comprises the steps of: receiving a downlink control channel in a first subframe of a main component carrier; and receiving a data channel on the first subframe and a second subframe after the first subframe, based on control information included in the downlink control channel, wherein the data channel is received through only one or through a plurality of sub-component carriers in the second subframe, and the control information includes a carrier identifier for identifying component carriers and/or a subframe identifier for identifying subframes.

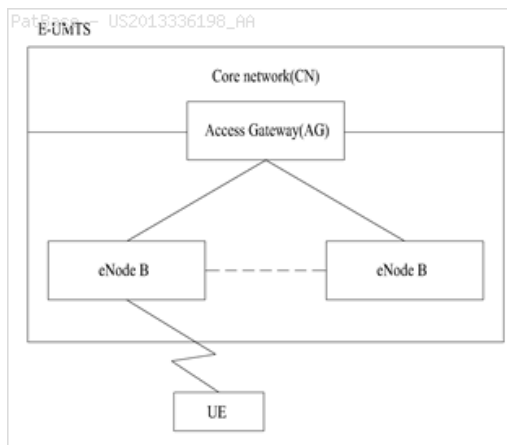
Classifications:

International (IPC 8-9): H04B7/14 H04J11/00 H04L5/00 H04W72/04 (Advanced/Invention); H04B7/155 (Advanced/Non-invention)

CPC: H04W72/042 H04L5/0055 H04J11/0069 H04L1/0038 H04B7/15528 H04L5/001 H04L5/0048 H04L5/0053

European: H04J11/00J

US: 370/315



Family:

Publication number	Publication date	Application number	Application date
EP2683097 A2	20140108	EP20120751897	20120203
EP2683097 A4	20141001	EP20120751897	20120203
KR101913260 B1	20181030	KR20137019738	20120203
KR20140006842 A	20140116	KR20137019738	20120202
US2013336198 AA	20131219	US20120984501	20120202
US2013336198 AA	20131219	US20120984501	20120203
US9750002 BB	20170829	US20120984501	20120203
WO12118281 A2	20120907	WO2012KR00820	20120203
WO12118281 A3	20121101	WO2012KR00820	20120203
WO12118281 A8	20131017	WO2012KR00820	20120203

Priority:

US20110448190P 20110301 US20110449056P 20110303 WO2012KR00820 20120202
 WO2012KR00820 20120203 US20120984501 20120203

Probable Assignee: LG ELECTRONICS INC

Assignee(s): (std): KIM HAKSEONG ; LG ELECTRONICS INC ; SEA HANBYUL ; SEO HANBYUL ; YANG SUCKCHEL

Inventor(s): (std): KIM HAKSEONG ; YANG SUCKCHEL ; SEO HANBYUL ; SEA HANBYUL ; SEO HAN BYUL ; KIM HAK SEONG ; YANG SUCK CHEL

Agent(s): KATERLE AXEL; DENTONS US LLP; KIM YONG IN ET AL

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

13) Family number: 59005646 (US2016254892A)

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Title: METHOD AND APPARATUS FOR TRANSMITTING SRS IN WIRELESS CELLULAR MOBILE COMMUNICATION SYSTEM

Abstract: The present invention relates to a method for transmitting, by a terminal, a sounding reference signal (SRS) or a physical uplink shared channel (PUSCH) in a mobile communication system. A communication method for a terminal in a communication system which supports the combination of configuration carrier using FDD scheme and configuration carrier using TDD scheme, in accordance with an embodiment of the present invention, comprises the steps of: receiving SRS transmission setting information from a base station; receiving uplink data scheduling information from the base station; determining whether or not the simultaneous transmission of the SRS transmission and the uplink data occurs; and setting the transmission of the uplink data or the SRS so that when the simultaneous transmission of the SRS transmission and the uplink data occurs, the sum of the respective transmission powers of the first and second symbols in an FDD cell and the first and second symbols of a TDD cell is not greater than the maximum transmission power of the terminal, wherein the timing of the first symbol in the FDD cell corresponds to the timing of the first symbol in the TDD cell, and the timing of the second symbol in the FDD cell corresponds to the timing of the second symbol in the TDD cell. In accordance with an embodiment of the present invention, defining the SRS transmission method of the terminal in a wireless communication system causes the terminal to effectively transmit the uplink data.

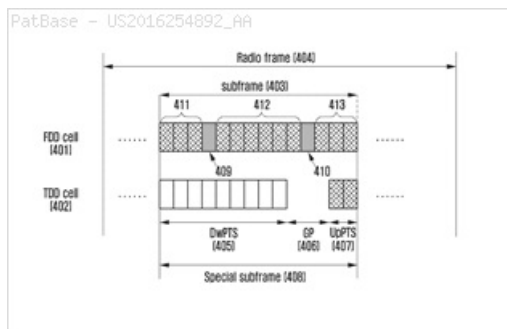
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CPC: H04B7/2615 H04B7/2603 H04W52/325 H04L5/001 H04L5/0048 H04L5/1469 H04L5/0051 H04L5/14 H04L5/0016 H04W52/146 H04W52/34 H04W72/1268 H04W52/367

US: 370/280

JP F-Term: 5K004 5K004/AA08 5K004/JH02 5K022 5K067 5K067/CC02 5K067/CC04 5K067/DD25 5K067/EE02 5K067/EE64 5K067/GG03 5K067/GG08 5K067/JJ13

JP F-Index: H04J11/00/Z H04L27/00/K H04L27/01 H04L27/26/100 H04L27/26/114 H04L27/26/300 H04W52/32 H04W72/04/111 H04W72/04/131 H04W72/04/136 H04W72/12/150



Family:

Publication number	Publication date	Application number	Application date
CN105814812 A	20160727	CN201480067882	20141010
DE602014029324 D1	20180823	DE201460029324T	20141010
EP3057245 A1	20160817	EP20140852187	20141010

EP3057245 A4	20170524	EP20140852187	20141010
EP3057245 B1	20180725	EP20140852187	20141010
EP3410614 A1	20181205	EP20180185227	20141010
IN201637012534 A	20160826	IN201637012534	20160409
JP2016534595 T2	20161104	JP20160521934T	20141010
KR20150042682 A	20150421	KR20140012251	20140203
PL3057245 T3	20190131	PL20140852187T	20141010
US2016254892 AA	20160901	US20140028616	20141010
WO15053590 A1	20150416	WO2014KR09539	20141010

Priority:

KR20130121346 20131011 KR20140012251 20140203 EP20140852187 20141010
WO2014KR09539 20141010

Probable Assignee: SAMSUNG ELECTRONICS CO LTD

Assignee(s): (std): SAMSUNG ELECTRONICS CO LTD

Assignee(s): SAMSUNG ELECTRONICS CO LTD SUWON SI ; SAMSUNG ELECTRONICS CO

Inventor(s): (std): CHO JOONYOUNG ; KIM YOUNGBUM ; JI HYOUNGJU ; CHOI SEUNGHOO ; CHO JOONYOUNG

Inventor(s): CHO JOON YOUNG ; CHOI SEUNG HOON ; JI HYOUNG JU ; KIM YOUNG BUM

Agent(s): GULDE AND PARTNER PATENT U RECHTSANWALTSKANZLEI MBB; GULDE AND PARTNER; YOON DONG YOL

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 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

14) Family number: 55156648 (US2015146586A)

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Title: USER TERMINAL, RADIO COMMUNICATION METHOD AND RADIO COMMUNICATION SYSTEM

Abstract: The present invention is designed to allow effective allocation of PUCCH resources, even when the ratio between uplink subframes and downlink subframes is changed in each cell, in CA by TDD. A user terminal communicates with a radio base station by means of TDD, in a communication band that is broadbanded by CA between a first cell and a second cell, and has a receiving section that receives downlink control information for the first cell and downlink control information for the second cell, allocated to a downlink control channel of the first cell, a retransmission control determining section that determines retransmission control for downlink signals transmitted from each cell, a transmitting section that feeds back retransmission control signals to the radio base station using the PUCCH of the first cell, and a resource selection section that selects the PUCCH resources to feed back the retransmission control signals, and, when the ratio of DL subframes is higher in the second cell than in the first cell, the resource selection section determines the PUCCH resources to allocate the retransmission control signals that correspond to the first cell and the second cell to, by different methods.

Classifications:

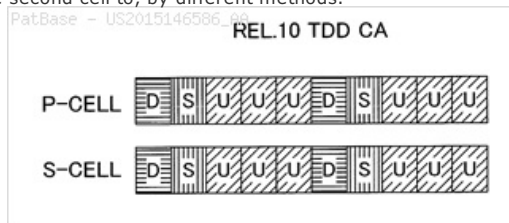
International (IPC 8-9): H04L1/18 H04L5/14 H04W28/04 H04W72/04 (Advanced/Invention)

CPC: H04W72/0413 H04L5/1469 H04L1/18 H04W72/042

US: 370/280

JP F-Term: 5K067/5K067/AA21 5K067/EE02 5K067/EE10 5K067/HH28 5K067/JJ13

JP F-Index: H04Q7/00/263 H04Q7/00/544 H04Q7/00/551 H04W28/04/110 H04W72/04/111 H04W72/04/136



Family:

Publication number	Publication date	Application number	Application date
CN104335652 A	20150204	CN201380024705	20130509
CN104335652 B	20180508	CN201380024705	20130509
JP2013239792 A2	20131128	JP20120109983	20120511
JP5979968 B2	20160831	JP20120109983	20120511
US2015146586 AA	20150528	US20130399974	20130509
US9648598 BB	20170509	US20130399974	20130509
WO13168775 A1	20131114	WO2013JP63070	20130509

Priority:

JP20120109983 20120511 WO2013JP63070 20130509

Probable Assignee: NTT DOCOMO INC

Assignee(s): (std): NTT DOCOMO INC

Assignee(s): N A

Inventor(s): (std): CHEN LAN ; LIU LIU ; LU YANG ; MU QIN ; TAKEDA KAZUAKI

Agent(s): OSHA LIANG LLP; AOKI HIROYOSHI ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT 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 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

15) Family number: 59898681 (US2017041921A)

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Title: METHOD FOR TRANSMITTING UPLINK CONTROL INFORMATION, WIRELESS TERMINAL, AND BASE STATION

Abstract: A wireless terminal (1) is configured to, (a) when transmitting uplink control information in a first subframe of a radio frame, determine the number of coded symbols (Q') for the uplink control information by a first calculation method, and

(b) when transmitting the uplink control information in a second subframe of the radio frame, determine the number of the coded symbols (Q') for the uplink control information by a second calculation method different from the first calculation method. This can contribute, for example, to adjusting redundancy of coded uplink control information (UCI) bits on a per-subframe basis.

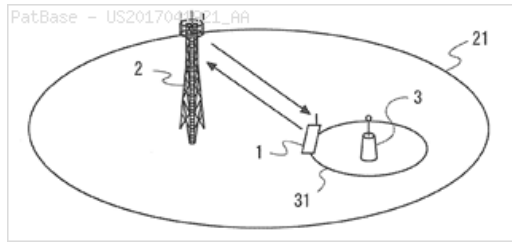
Classifications:

International (IPC 8-9): H04J11/00 H04L1/00 H04L1/08 H04L1/16 H04L27/01 H04L5/00 H04W72/04 H04W76/02 (Advanced/Invention)
CPC: H04L1/00 H04L5/0073 H04L1/1671 H04L1/1861 H04W72/0413 H04L1/0073 H04L5/0055 H04L5/0057 H04W76/10

US: 370/329

JP F-Term: 5K014 5K014/DA02 5K014/DA03 5K014/FA03 5K014/HA10 5K067 5K067/AA03 5K067/BB02 5K067/CC01 5K067/EE02 5K067/EE10 5K014/BA05 5K014/FA16 5K067/DD11 5K067/HH25

JP F-Index: H04L1/08 H04W72/04/131 H04W72/04/136 H04L1/00/B



Family:

Publication number	Publication date	Application number	Application date
CN105917608 A	20160831	CN201480073425	20141216
EP3096478 A1	20161123	EP20140878960	20141216
EP3096478 A4	20170913	EP20140878960	20141216
IN201617021104 A	20160831	IN201617021104	20160620
JP2015107600 A1	20170323	JP20150557595T	20141216
JP2018164258 A2	20181018	JP20180079675	20180418
JP6327257 B1	20180523	JP20150557595T	20141216
MX2016009006 A1	20161004	MX2016009006	20141216
RU2639311 C1	20171221	RU20160133300	20141216
RU2669917 C1	20181017	RU20170143147	20141216
US2017041921 AA	20170209	US20140107167	20141216
WO15107600 A1	20150723	WO2014JP06241	20141216

Priority:

JP20140004945 20140115 JP20150557595T 20141216 WO2014JP06241 20141216
JP20180079675 20180418

Probable Assignee: NEC CORP

Assignee(s): (std): NEC CORP ; NEK KORPOREJSHN

Inventor(s): (std): KENGO OKETANI ; OKETANI KENGO

Agent(s): MACDOUGALL ALAN JOHN SHAW; IEIRI TAKESHI; OOO YURIDICHESKAYA GORODISSKIY I PARTNERY
FA; YURIDICHESKAYA GORODISSKIY I PARTNERY OOO FA

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

16) Family number: 60801693 (US2015334660A)

PatBase

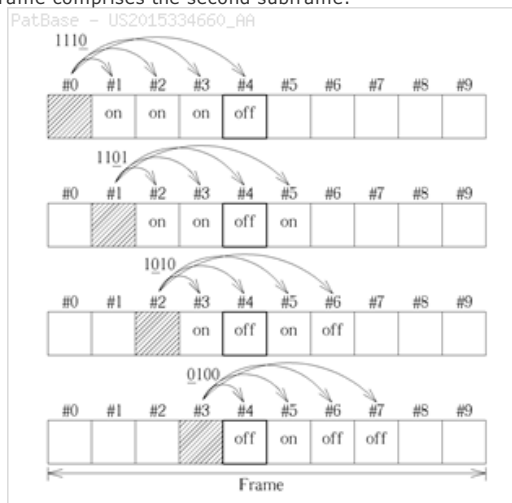
Title: METHOD OF HANDLING ON-OFF STATE OF A CELL AND RELATED COMMUNICATION DEVICE

Abstract: A method of handling an on-off state of a cell for a communication device comprises receiving a first downlink (DL) control information (DCI) in a first subframe from a network, wherein the first DCI indicates at least one first on-off state of at least one first subframe of a first cell of the network; and determining an on-off state of a second subframe of the first cell according to the first DCI, wherein the at least one first subframe comprises the second subframe.

Classifications:

International (IPC 8-9): H04L29/02 H04L5/00 H04W16/02 H04W24/04 H04W24/08 H04W52/02 H04W72/04 H04W72/12 H04W76/04 (Advanced/Invention); H04W52/00 H04W52/02 (Advanced/Non-invention)
CPC: H04W52/0274 H04W72/042 H04W52/02 H04W72/1289 H04W76/20 H04L5/0053 H04L5/0091 H04W52/0206 Y02D70/1242 Y02D70/1262 Y02D70/1264 Y02D70/21

US: 370/328



Family:

Publication number	Publication date	Application number	Application date
CN105101365 A	20151125	CN201510242209	20150513
CN108377541 A	20180807	CN201810444894	20150513
EP2953288 A2	20151209	EP20150167269	20150512
EP2953288 A3	20160316	EP20150167269	20150512
EP3376704 A1	20180919	EP20180171485	20150512
TW201543915 A	20151116	TW20150115181	20150513

TWI583214 B	20170511	TW20150115181	20150513
US2015334660 AA	20151119	US20150709448	20150511
US2018249418 AA	20180830	US20180968746	20180501

Priority:

US20140992262P 20140513 US20150709448 20150511 EP20150167269 20150512
CN201510242209 20150513 US20180968746 20180501

Probable Assignee: ACER INC

Assignee(s): (std): ACER INC

Inventor(s): (std): HSIEH CHIA WEN

Agent(s): STRAUS ALEXANDER; BECKER KURIG STRAUS

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

17) Family number: 53426785 (US2014226551A)

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Title: TERMINAL APPARATUS, COMMUNICATION SYSTEM, COMMUNICATION METHOD, AND BASE STATION APPARATUS

Abstract: In a communication system in which a base station apparatus and a terminal apparatus communicate with each other, a base station apparatus, a terminal apparatus, and a communication system with which the base station apparatus and the terminal apparatus can efficiently communicate with each other are provided. The terminal apparatus that communicates with the base station apparatus includes a radio resource control section 6011 that sets a first uplink power control-related parameter configuration and a second uplink power control-related parameter configuration in accordance with information included in a radio resource control (RRC) signal, a reception unit 605 that determines a type of downlink control information (DCI) format, a transmission power control section 6015 that sets uplink transmission power on the basis of the first uplink power control-related parameter configuration or the second uplink power control-related parameter configuration, and a transmission unit 607 that transmits an uplink signal with the set uplink transmission power.

Classifications:

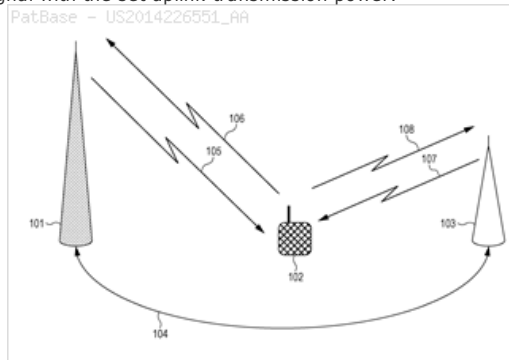
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H04W52/54 H04W72/04 (Advanced/Invention);
H04W52/14 H04W52/24 (Advanced/Non-invention)

CPC: H04W72/0473 H04W72/0406 H04W52/04 H04W52/146
H04W52/244 H04W52/247 H04W52/325 H04W52/40 H04W52/54

US: 370/311

JP F-Term: 5K004 5K022 5K067 5K067/AA13 5K067/DD43
5K067/DD44 5K067/GG08

JP F-Index: H04J11/00/Z H04J13/00/100 H04L27/26/114
H04L27/26/300 H04Q7/00/435 H04Q7/00/440 H04W52/14
H04W52/24



Family:

Publication number	Publication date	Application number	Application date
CN103843422 A	20140604	CN201280047823	20120905
CN103843422 B	20180508	CN201280047823	20120905
DE602012039625 D1	20171214	DE201260039625T	20120905
EP2763470 A1	20140806	EP20120835413	20120905
EP2763470 A4	20150805	EP20120835413	20120905
EP2763470 B1	20171108	EP20120835413	20120905
JP2013077926 A2	20130425	JP20110215784	20110930
JP5813444 B2	20151117	JP20110215784	20110930
US2014226551 AA	20140814	US20120348270	20120905
US9516650 BB	20161206	US20120348270	20120905
WO13047129 A1	20130404	WO2012JP72614	20120905

Priority:

JP20110215784 20110930 EP20120835413 20120905 WO2012JP72614 20120905

Probable Assignee: SHARP KK

Assignee(s): (std): IMAMURA KIMIHIKO ; KATO YASUYUKI ; NAKASHIMA DAIICHIRO ; NOGAMI TOSHIZO ; OUCHI WATARU ; SHARP KK ; UEMURA KATSUNARI ; SUZUKI SHOICHI ; SHIMEZAWA KAZUYUKI

Assignee(s): SHARP KABUSHIKI KAISHA ; SHARP CORP ; SHARP KABUSHIK KAISHA

Inventor(s): (std): IMAMURA KIMIHIKO ; KAMIMURA KATSUNARI ; KATO YASUYUKI ; NAKAJIMA TAIICHIRO ; NAKASHIMA DAIICHIRO ; NOGAMI TOMOZO ; NOGAMI TOSHIZO ; OUCHI WATARU ; SHIMEZAWA KAZUYUKI ; SHISAWA TOSHIYUKI ; SUZUKI SHOICHI ; UEMURA KATSUNARI

Agent(s): MUELLER BORE AND PARTNER PATENTANWAELE PARTG MBB; KEATING AND BENNETT LLP; FUKUCHI TAKEO

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

18) Family number: 53426789 (US2014247796A)

© PatBase

Title: TERMINAL APPARATUS, COMMUNICATION SYSTEM, BASE STATION APPARATUS, AND COMMUNICATION METHOD

Abstract: In a communication system in which a base station apparatus and a terminal apparatus communicate with each other, a base station apparatus, a terminal apparatus, and a communication system with which the base station apparatus

and the terminal apparatus can efficiently communicate with each other are provided. The terminal apparatus that communicates with the base station apparatus includes a radio resource control section 6011 that configures a plurality of uplink physical channels and that configures an uplink power control-related parameter for each of the plurality of uplink physical channels in accordance with information included in a radio resource control (RRC) signal and a transmission power control section 6015 that sets transmission power of the uplink physical channels on the basis of the uplink power control-related parameters.

Classifications:

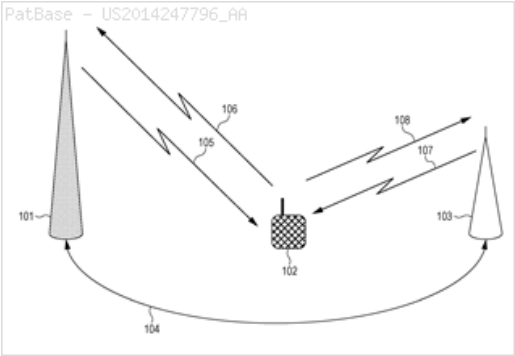
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H04W52/14 H04W52/18 H04W52/22 H04W52/24 H04W52/38
H04W52/40 (Advanced/Invention);
H04B1/707 H04J13/00 H04L27/26 H04L5/00
H04W52/14 (Advanced/Non-invention)

CPC: H04L5/0053 H04W52/18 H04B1/707 H04J13/0048 H04L5/001
H04L27/2601 H04W52/146 H04W52/242 H04W52/40

US: 370/329

JP F-Term: 5K067 5K067/AA21 5K067/BB04 5K067/DD51
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5K067/HH23 5K159

JP F-Index: H04B7/022 H04Q7/00/235 H04Q7/00/280
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Family:

Publication number	Publication date	Application number	Application date
CN103843423 A	20140604	CN201280047843	20120905
CN103843423 B	20180824	CN201280047843	20120905
EP2763471 A1	20140806	EP20120837425	20120905
EP2763471 A4	20150422	EP20120837425	20120905
EP2763471 B1	20180704	EP20120837425	20120905
JP2013085233 A2	20130509	JP20120213951	20120927
JP6268417 B2	20180131	JP20120213951	20120927
US2014247796 AA	20140904	US20120348163	20120905
US2018014257 AA	20180111	US20170712332	20170922
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WO13047130 A1	20130404	WO2012JP72616	20120905

Priority:

JP20110215785 20110930 WO2012JP72616 20120905 JP20120213951 20120927
US20140348163 20140328 US20170712332 20170922

Probable Assignee: SHARP KK

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Agent(s): MUELLER BORE AND PARTNER PATENTANWAELE PARTG MBB; KEATING AND BENNETT LLP; FUKUCHI
TAKEO

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
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SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

19) Family number: 59635826 (US2016323855A) © PatBase

Title: TERMINAL DEVICE AND BASE STATION DEVICE

Abstract: Selection of a suitable MCS improves throughput without increasing the number of pieces of control information. Provided is a terminal apparatus including: a control information extraction unit 703 that receives control information for requesting a CSI notification; a CQI determination unit 707 that calculates CQI according to the control information and calculates a CQI index by any CQI table of a first CQI table and a second subframe from the CQI; and a UL transmission unit 711 that performs uplink transmission of the CQI index to a base station apparatus, in which, in a case where the control information is received on a first downlink subframe set, the CQI determination unit 707 generates the CQI index using the first CQI table, and in which, in a case where the control information is received on a second downlink subframe set, the CQI determination unit 707 generates the CQI index using the second CQI table.

Classifications:

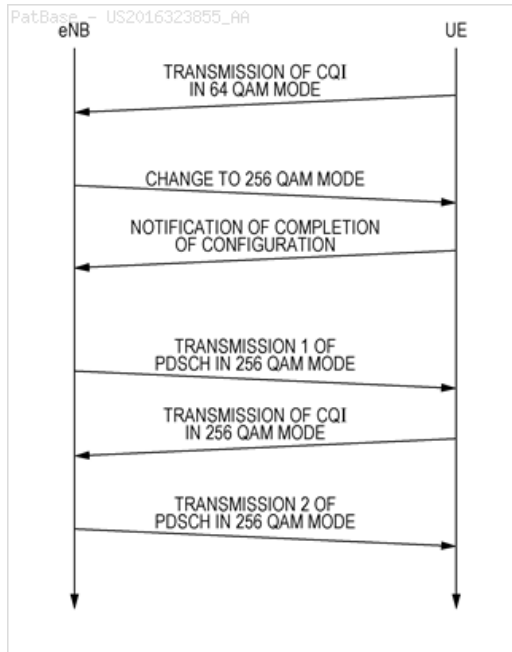
International (ipc 8-9): H04B7/06 H04L1/00 H04L27/34 H04L27/36
H04L5/00 H04W24/10 H04W28/06 H04W28/18 H04W72/00
H04W72/04 H04W72/08 H04W72/12 (Advanced/Invention)

CPC: H04W28/06 H04W72/00 H04L1/0003 H04L1/0028 H04W72/042
H04L1/0004 H04L1/001 H04L27/3461 H04W72/1289 H04B7/0626
H04L27/362 H04W72/1284 H04L1/0026 H04L1/0016 H04L5/0053
H04L27/34 H04L5/0073

US: 370/329

JP F-Term: 5K067 5K067/AA13 5K067/AA23 5K067/AA42
5K067/EE02 5K067/EE10 5K067/EE22 5K014 5K014/AA03
5K014/FA12 5K014/GA01 5K067/DD45

JP F-Index: H04W72/12/110 H04L1/00/E H04W24/10 H04W28/06
H04W28/18/110



Family:

Publication number	Publication date	Application number	Application date
CN105723769 A	20160629	CN201480061697	20141226
CN105766021 A	20160713	CN201480063617	20141226
EP3089508 A1	20161102	EP20140875411	20141226
EP3089508 A4	20170201	EP20140875411	20141226
EP3089512 A1	20161102	EP20140875328	20141226
EP3089512 A4	20170125	EP20140875328	20141226
EP3277019 A1	20180131	EP20170001468	20141226
JP2015099172 A1	20170323	JP20150555071T	20141226
JP2015099173 A1	20170323	JP20150555072T	20141226
US2016323855 AA	20161103	US20140107516	20141226
US2016323912 AA	20161103	US20140107510	20141226
WO15099172 A1	20150702	WO2014JP84688	20141226
WO15099173 A1	20150702	WO2014JP84689	20141226

Priority:

JP20130270703 20131227 JP20140016279 20140131 EP20140875411 20141226
 WO2014JP84689 20141226 WO2014JP84688 20141226

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Agent(s): MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; FUKUCHI TAKEO

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

20) Family number: 60397844 (US2015271810A)

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Title: SYSTEM AND METHOD FOR AVOIDING COLLISIONS BETWEEN OPEN DISCOVERY AND CELLULAR RESOURCES

Abstract: A method for signaling control information in a communications system includes identifying a first subframe to carry first control information, and determining whether the first subframe is configured as a device-to-device (D2D) subframe. The method also includes transmitting the first control information in the first subframe to an evolved NodeB (eNB) when the first subframe is not configured as a D2D subframe, wherein the first control information is encoded with a first encoding rule in accordance with a first subframe, and transmitting the first control information in a second subframe when the first subframe is configured as a D2D subframe, wherein the first control information is encoded with a second encoding rule in accordance with the second subframe.

Classifications:

International (IPC 8-9): H04L1/18 H04L5/14 H04W72/04 H04W72/12

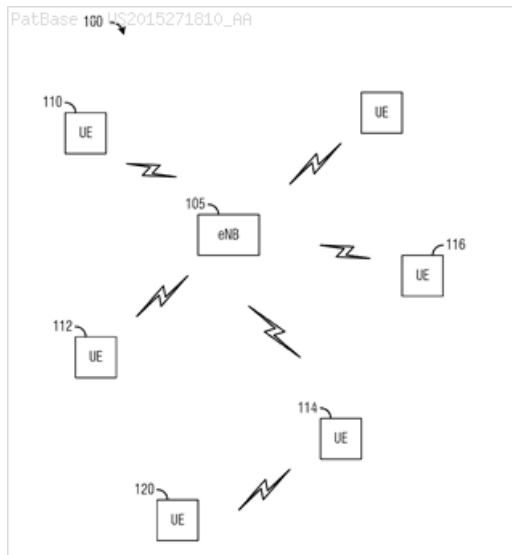
H04W8/00 (Advanced/Invention);

H04W76/02 (Advanced/Non-invention)

CPC: H04W72/0413 H04L5/14 H04W8/005 H04W72/1284 H04W76/14

H04L5/0053

US: 370/280 370/329



Family:

Publication number	Publication date	Application number	Application date
US2015271810 AA	20150924	US20150663050	20150319
US9648599 BB	20170509	US20150663050	20150319
WO15139669 A1	20150924	WO2015CN074818	20150321

Priority:

US20140968877P 20140321 US20150663050 20150319

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Inventor(s): SOONG ANTHONY CK

Agent(s): SLATER MATSIL LLP

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

21) Family number: 60397871 (US2015271861A)

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Title: METHODS AND APPARATUS FOR DEVICE TO DEVICE SYNCHRONIZATION PRIORITY

Abstract: A Device to Device (D2D) user equipment (UE) is configured to support synchronization in a D2D network. The D2D UE includes an antenna configured to communicate via a D2D communication. The D2D UE also includes processing circuitry configured to enter a communication Mode 2 when certain conditions are met. The certain conditions include: when a first timer (T310) for detecting radio link failure is running, a second timer (T311) for initiating the connection reestablishment is running, or a third timer (T301) for requesting connection reestablishment is running. In communication Mode 2, the D2D UE, on its own, selects resources from resource pool(s) to transmit D2D data and D2D control information. The processing circuitry further configured to exit the communication Mode 2 and enter a communication Mode 1 when the certain condition is no longer met. In communication Mode 1, the D2D UE uses resources configured by another station.

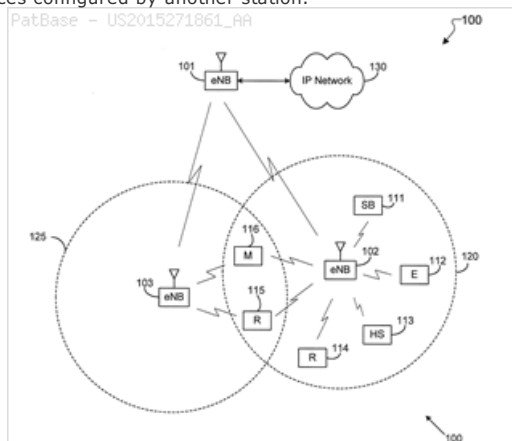
Classifications:

International (IPC 8-9): H04B1/00 H04L1/00 H04W24/10 H04W56/00 H04W72/02 H04W72/04 H04W76/02 H04W76/04 H04W76/06 H04W76/14 H04W88/02 H04W92/18 (Advanced/Invention); H04W72/02 H04W76/19 (Advanced/Non-invention)
CPC: H04W56/001 H04W72/048 H04W72/02 H04W76/027 H04W76/068 H04W76/19 H04W76/18 H04W76/38 H04W76/14 H04W72/042

US: 455/426.1 455/552.1

JP F-Term: 5K067 5K067/DD25 5K067/EE02 5K067/EE10 5K067/EE25

JP F-Index: H04W72/02 H04W72/04 H04W76/04 H04W76/20 H04W92/18



Family:

Publication number	Publication date	Application number	Application date
CN106105370 A	20161109	CN201580015437	20150320
EP3120660 A1	20170125	EP20150764615	20150320
EP3120660 A4	20171122	EP20150764615	20150320
IN201637030959 A	20170303	IN201637030959	20160910
JP2017509261 T2	20170330	JP20160558372T	20150320

KR20160136273 A	20161129	KR20167017784	20150320
US2015271861 AA	20150924	US20150640846	20150306
US2018332647 AA	20181115	US20180045968	20180726
WO15142113 A1	20150924	WO2015KR02747	20150320

Priority:

US20140968860P 20140321 US20140982674P 20140422 US20140003398P 20140527
US20150640846 20150306 WO2015KR02747 20150320 US20180045968 20180726

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Assignee(s): SAMSUNG ELECTRONICS CO

Inventor(s): (std): LI YING ; NG BOON LOONG ; NOVLAN THOMAS DAVID ; PETRUS VAN LIESHOUT GERARDUS JOHANNES ; VAN LIESHOUT GERARDUS JOHANNES PETRUS

Agent(s): NEDERLANDSCH OCTROOIBUREAU; LEE KEON JOO 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