

7 Documents

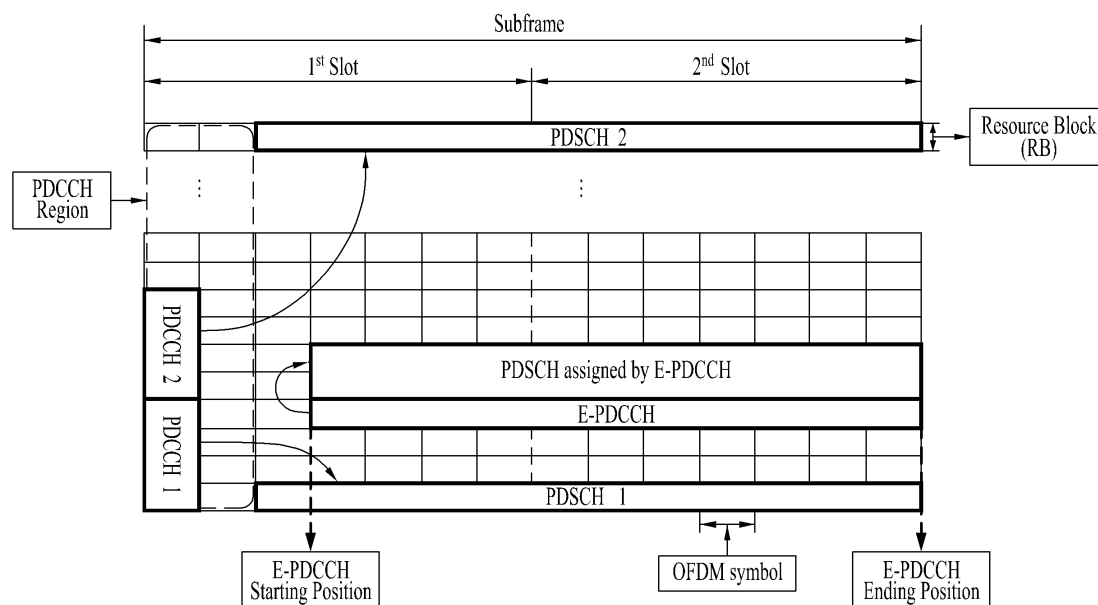
Publication numbers	Title	Current assignees
WO2013129870 A1	Method for setting search region to detect downlink control channel in wireless communication system and apparatus for same	LG ELECTRONICS
EP2982076 A2	Epdccch common search space design for one or more carrier types	INTERDIGITAL PATENT HOLDINGS
EP2730104 A1	Dm rs based downlink lte physical layer	NOKIA SOLUTIONS & NETWORKS
EP3534563 A1	Method, base station, ue, and system for sending and receiving pdccch signaling	HUAWEI
EP3451761 A1	Downlink control information sending method and detection method and device	HUAWEI
EP3471319 A1	Method for transmitting/receiving data in wireless communication system and apparatus therefor	LG ELECTRONICS
EP2996415 A1	Terminal device, communication method, and integrated circuit	SHARP

Family 1/7 - FAMPAT - ©Questel

Title

(WO2013129870)

Method for setting search region to detect downlink control channel in wireless communication system and apparatus for same

Images**Publication numbers with kind code & date**

KR10-2065420	B1	2020-01-13	KR102065420
US10306614	B2	2019-05-28	US10306614
US20160345306	A1	2016-11-24	US20160345306
US9432985	B2	2016-08-30	US9432985
KR20140142692	A	2014-12-12	KR20140142692
US20140362758	A1	2014-12-11	US20140362758
WO2013/129870	A1	2013-09-06	WO2013129870

**Abstract**

(WO2013/129870)

In the present application, disclosed a method for a terminal setting a search region for a downlink channel in a wireless communication system. More specifically, the method comprises the steps of: receiving from a base station information related to a starting symbol of the search region by way of upper layer signaling; setting the search region by using the information related to the starting symbol; and receiving the downlink control channel by performing blind coding on the search region, wherein the starting symbol of the search region changes according to the characteristic of a subframe which receives the downlink control channel.

Inventors

LEE SEUNGMIN
KIM HAKSEONG
SEO HANBYUL

Latest standardized assignees - inventors removed

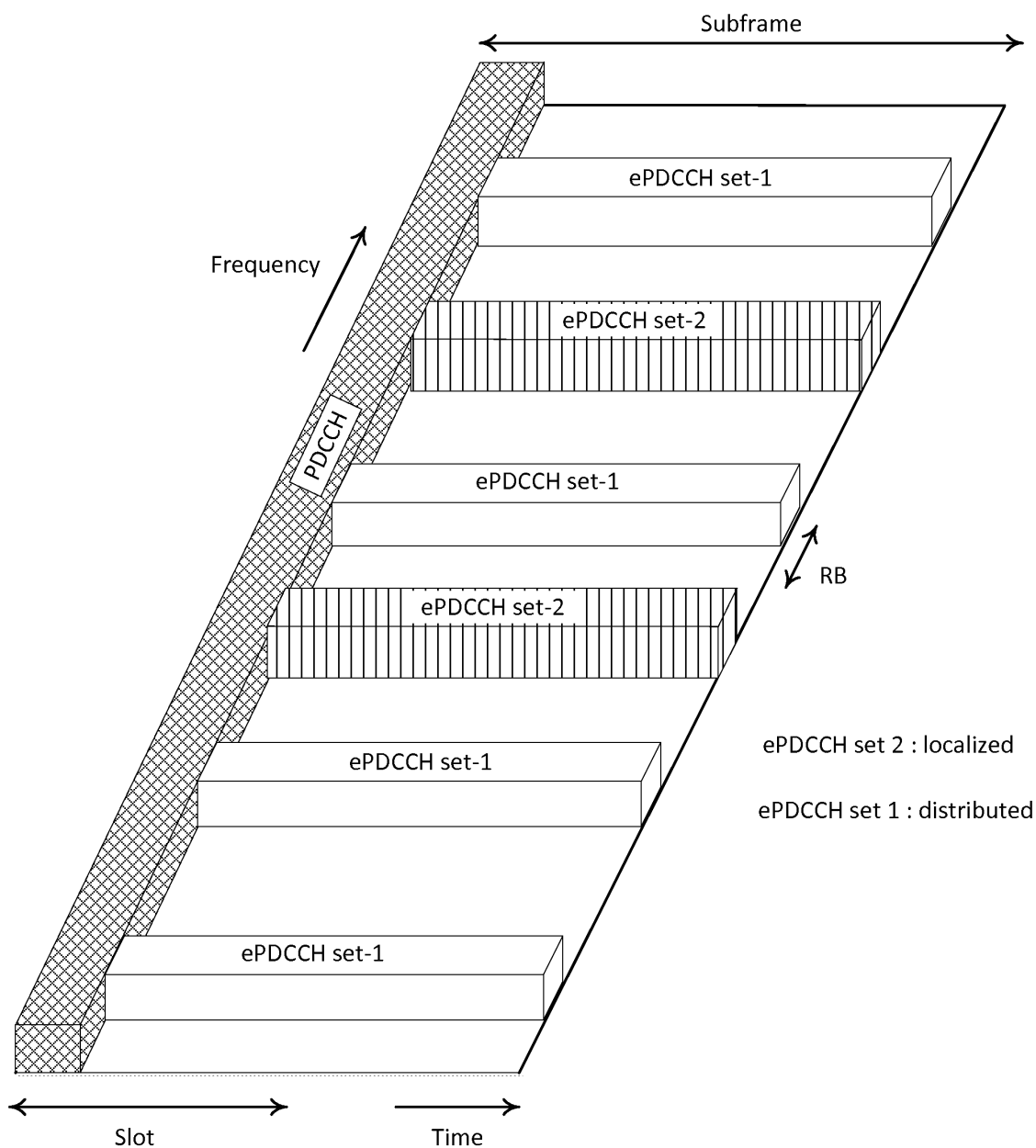
LG ELECTRONICS

Family 2/7 - FAMPAT - ©Questel

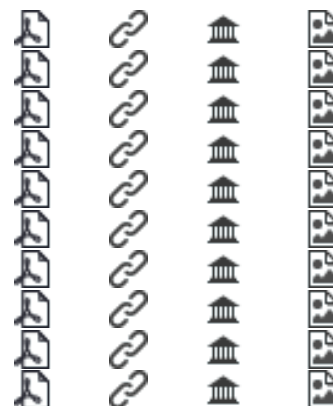
Title

(EP2982076)

Epdcc common search space design for one or more carrier types

Images**Publication numbers with kind code & date**

CN110224799	A	2019-09-10	CN110224799
EP3509240	A1	2019-07-10	EP3509240
TW201921962	A	2019-06-01	TW201921962
CN105075170	B	2019-05-03	CN105075170B
US20160043849	A1	2016-02-11	US20160043849
EP2982076	A2	2016-02-10	EP2982076
CN105075170	A	2015-11-18	CN105075170
TW201507497	A	2015-02-16	TW201507497
WO2014/165678	A3	2014-11-27	WO2014165678
WO2014/165678	A2	2014-10-09	WO2014165678

**Abstract**

(EP2982076)

Embodiments contemplate enhanced physical downlink control channel (EPDCCH). A user equipment (UE) or a wireless

transmit/receive unit (WTRU) may receive a first type (e.g., type 1) EPDCCH common search space (CSS) subframe for example is a subset of subframes. The UE or WTRU may monitor first type downlink control information (DCI), for example perhaps within the first type EPDCCH CSS subframe, among other scenarios. A broadcast channel (e.g. MIB) may be received in the first type EPDCCH CSS. The UE or the WTRU may receive configuration information for a second type (e.g., type 2) EPDCCH CSS, for example from the first type EPDCCH CSS. A system information block (SIB) may be received in the second type EPDCCH CSS. The UE or the WTRU may monitor a second type DCI, for example perhaps in the second type EPDCCH CSS.

Inventors

LEE MOON-IL

TAMAKI NOBUYUKI

Latest standardized assignees - inventors removed

INTERDIGITAL PATENT HOLDINGS

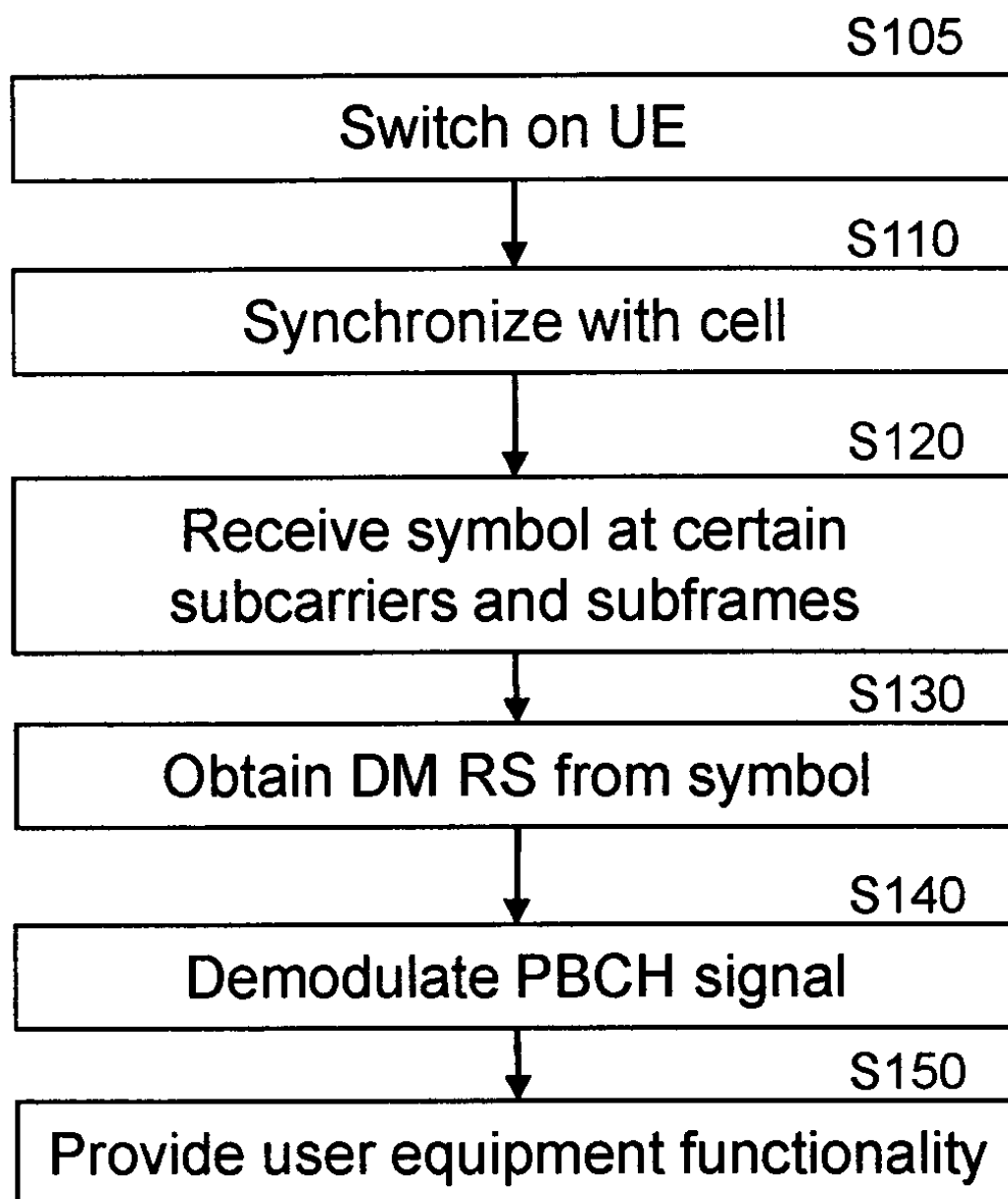
Family 3/7 - FAMPAT - ©Questel

Title

(EP2730104)

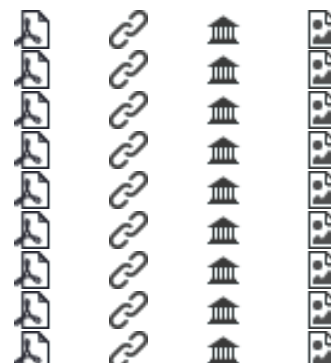
Dm rs based downlink lte physical layer

Images



Publication numbers with kind code & date

DK2730104	T3	2019-12-16	DK2730104T
EP2730104	B1	2019-10-09	EP2730104
CN103828396	B	2018-09-25	CN103828396B
US9848415	B2	2017-12-19	US9848415
EP2730104	A4	2015-02-18	EP2730104
US20140192786	A1	2014-07-10	US20140192786
CN103828396	A	2014-05-28	CN103828396
EP2730104	A1	2014-05-14	EP2730104
WO2013/003980	A1	2013-01-10	WO201303980



Abstract

(EP2730104)

It is provided an apparatus, comprising synchronizing means adapted to synchronize with a cell of a cellular communication system based on a synchronization signal and to obtain a cell identification of the cell; receiving means adapted to receive a symbol only on one or more subcarriers and subframes which carry at least one symbol of a physical broadcast channel; first obtaining means adapted to obtain a common demodulation reference symbol based on the cell identification and the received symbol; demodulating means adapted to demodulate a signal received on the physical broadcast channel based

on the common demodulation reference symbol; user equipment means adapted to provide a user equipment functionality of the communication system.

Inventors

SKOV PETER

WANG XIAOYI

MIAO DESHAN

Latest standardized assignees - inventors removed

NOKIA SOLUTIONS & NETWORKS

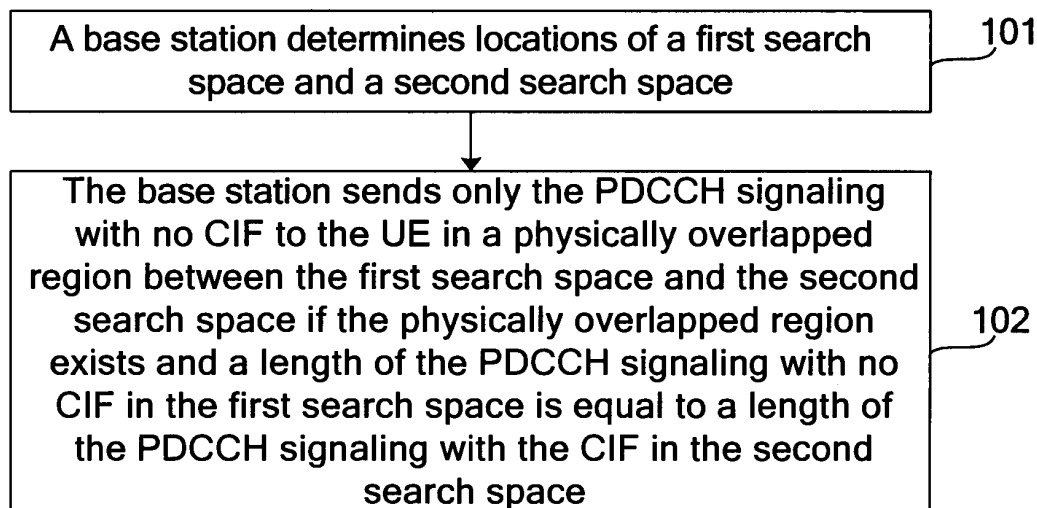
Family 4/7 - FAMPAT - ©Questel

Title

(EP3534563)

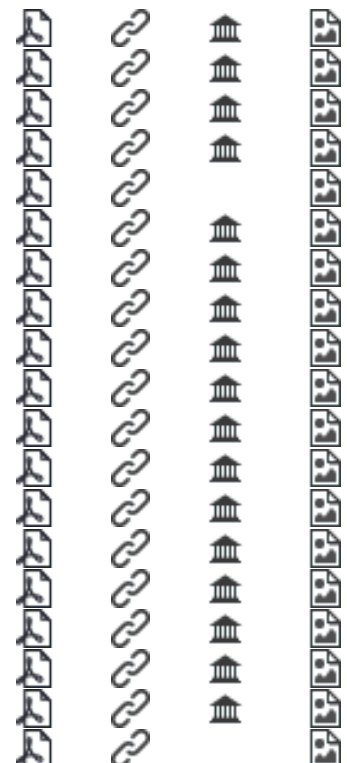
Method, base station, ue, and system for sending and receiving pdcch signaling

Images



Publication numbers with kind code & date

EP3534563	A1	2019-09-04	EP3534563
EP2672653	B1	2019-04-24	EP2672653
BR112012020255	B1	2019-01-15	BR112012020255
EP2672651	B1	2018-03-28	EP2672651
TR201802552	T4	2018-03-21	TR201802552
EP2672650	B1	2017-11-29	EP2672650
EP2672652	B1	2017-11-29	EP2672652
CN103428881	B	2016-12-28	CN103428881B
CN103442444	B	2016-12-07	CN103442444B
US9510341	B2	2016-11-29	US9510341
CN103476126	B	2016-08-24	CN103476126B
BR112012020255	A2	2016-05-03	BR112012020255
IN7214/CHENP/2012	A	2016-03-11	IN2012CN07214
US20160007326	A1	2016-01-07	US20160007326
US9137794	B2	2015-09-15	US9137794
US20150055599	A1	2015-02-26	US20150055599
JP5647363	B2	2014-11-14	JP5647363
US8879533	B2	2014-11-04	US8879533
KR101446639	B1	2014-10-01	KR101446639



KR101446639	B1	2014-10-01	KR101446639				
JP2014112918	A	2014-06-19	JP2014112918				
ES2450540	T3	2014-03-25	ES2450540				
EP2672653	A3	2014-02-19	EP2672653				
EP2672650	A3	2014-02-12	EP2672650				
JP5469751	B2	2014-02-07	JP5469751				
EP2672651	A3	2014-01-01	EP2672651				
EP2672652	A3	2014-01-01	EP2672652				
CN103476126	A	2013-12-25	CN103476126				
EP2536204	B1	2013-12-25	EP2536204				
CN103442444	A	2013-12-11	CN103442444				
EP2672650	A2	2013-12-11	EP2672650				
EP2672651	A2	2013-12-11	EP2672651				
EP2672652	A2	2013-12-11	EP2672652				
EP2672653	A2	2013-12-11	EP2672653				
CN103428881	A	2013-12-04	CN103428881				
CN102231915	B	2013-08-28	CN102231915B				
JP2013533649	A	2013-08-22	JP2013533649				
BR112012020255	A1	2013-07-09	BR112012020255				
US20130077589	A1	2013-03-28	US20130077589				
EP2536204	A4	2013-01-16	EP2536204				
US8340069	B2	2012-12-25	US8340069				
EP2536204	A1	2012-12-19	EP2536204				
KR20120123471	A	2012-11-08	KR20120123471				
MX2012009276	A	2012-10-15	MX2012009276				
US20120093112	A1	2012-04-19	US20120093112				
CN102231915	A	2011-11-02	CN102231915				
WO2011/098044	A1	2011-08-18	WO201198044				

Abstract

(EP3534563)

A method, base station, user equipment (UE) and system for a Physical Downlink Control Channel (PDCCH) signalling transmission and reception are provided in the present invention. The transmission method includes: a base station determining locations of a first search space and a second search space; if the PDCCH signalling length not including a Carrier Indicator Field (CIF) in the first search space is equal to the PDCCH signalling length including the CIF and there exists a physical overlap area between the first search space and the second search space, the base station only sending the PDCCH signalling not including the CIF to a UE in the physical overlap area. The fuzzy scheduling of the base station can be avoided with the method, base station, UE and system provided in the present invention, thereby the problem of the UE resolving error can be avoided.

Inventors

QU BINGYU

GUAN LEI

XUE LIXIA

Latest standardized assignees - inventors removed

HUAWEI

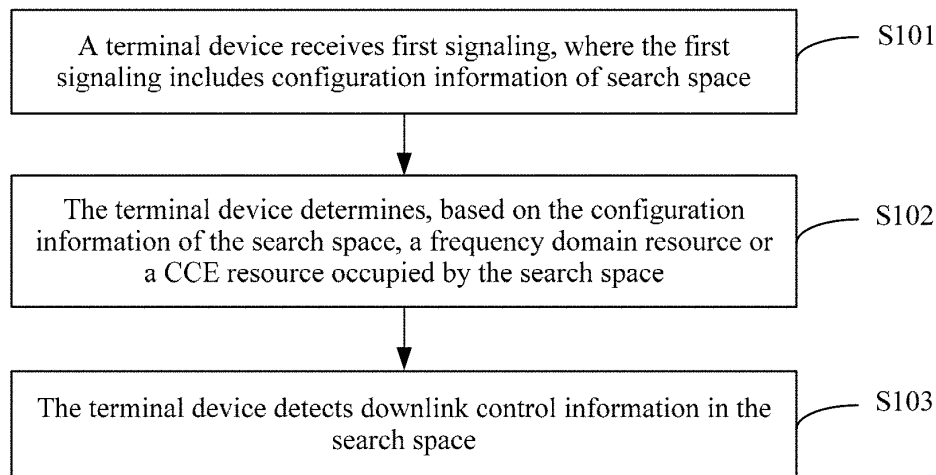
Family 5/7 - FAMPAT - ©Questel

Title

(EP3451761)

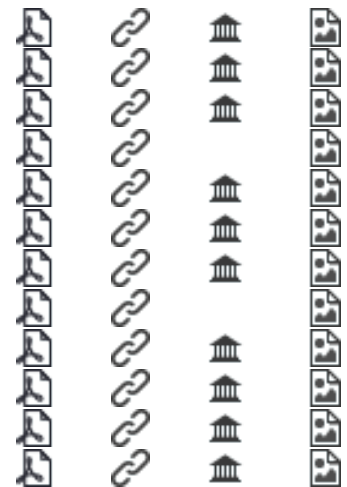
Downlink control information sending method and detection method and device

Images



Publication numbers with kind code & date

EP3451761	B1	2020-04-29	EP3451761
JP2019517208	A	2019-06-20	JP2019517208
EP3451761	A4	2019-04-24	EP3451761
VN62208	A	2019-03-25	VN--62208
US20190082430	A1	2019-03-14	US20190082430
EP3451761	A1	2019-03-06	EP3451761
BR112018073215	A2	2019-02-19	BR112018073215
KR10-2019-0005989	A	2019-01-16	KR20190005989
CN109076513	A	2018-12-21	CN109076513
IN201837043502	A	2018-12-14	IN201837043502
BR112018073215	A1	2018-11-21	BR112018073215
WO2017/193377	A1	2017-11-16	WO2017193377



Abstract

(EP3451761)

The present invention provides a downlink control information sending method, a downlink control information detection method, and a device. The method includes: receiving, by a terminal device, first signaling, where the first signaling includes configuration information of search space; determining, by the terminal device based on the configuration information, a frequency domain resource or a CCE resource occupied by the search space; and detecting, by the terminal device, downlink control information in the search space. A network device may configure the search space to occupy any frequency domain resource or CCE resource. The terminal device determines, based on the first signaling, the search space configured by the network device, and obtains the downlink control information in a timely manner. This effectively improves data transmission efficiency, and in particular, resolves a problem that downlink control information of duration less than 1 ms cannot be obtained in a timely manner.

Inventors

LI CHAOJUN

Latest standardized assignees - inventors removed

HUAWEI

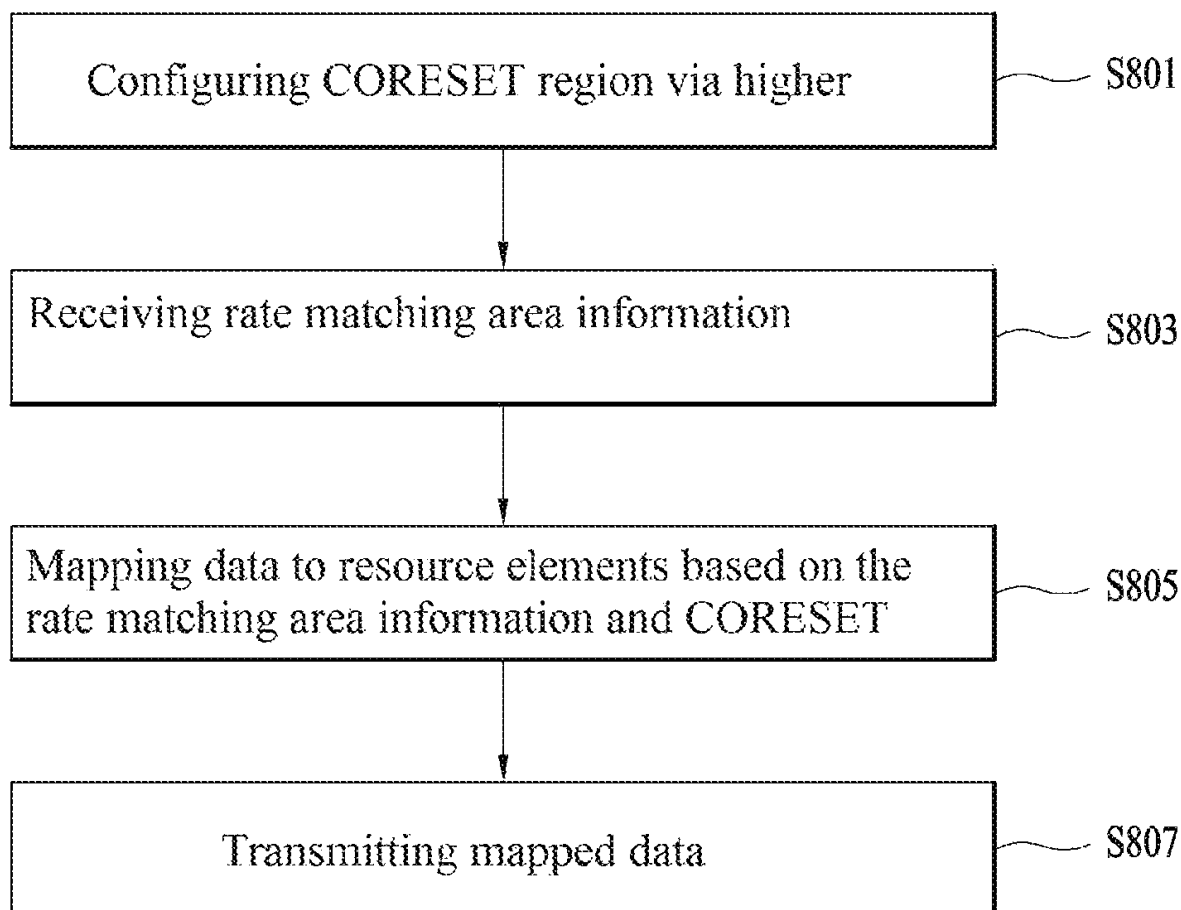
Family 6/7 - FAMPAT - ©Questel

Title

(EP3471319)

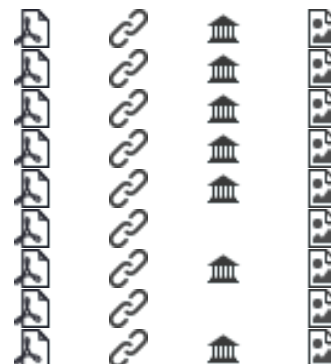
Method for transmitting/receiving data in wireless communication system and apparatus therefor

Images



Publication numbers with kind code & date

US10568086	B2	2020-02-18	US10568086
JP2020504513	A	2020-02-06	JP2020504513
US20190334677	A1	2019-10-31	US20190334677
CN110268671	A	2019-09-20	CN110268671
US20190200332	A1	2019-06-27	US20190200332
KR10-1992200	B1	2019-06-24	KR101992200
EP3471319	A1	2019-04-17	EP3471319
KR20180104062	A	2018-09-19	KR20180104062
WO2018/151533	A1	2018-08-23	WO2018151533



Abstract

(EP3471319)

A method for receiving data in a user equipment (UE) from an eNB in a wireless communication system is disclosed. The method comprises the steps of receiving one or more control resource set (CORESET) regions; receiving rate matching information from a higher layer; and receiving the data based on the one or more CORESET regions and the rate matching information, wherein the data are mapped into at least one CORESET indicated by the higher layer among the one or more CORESETs on the basis of the rate matching information.

Inventors

HWANG DAESUNG

YI YUNJUNG

SEO INKWON

Latest standardized assignees - inventors removed

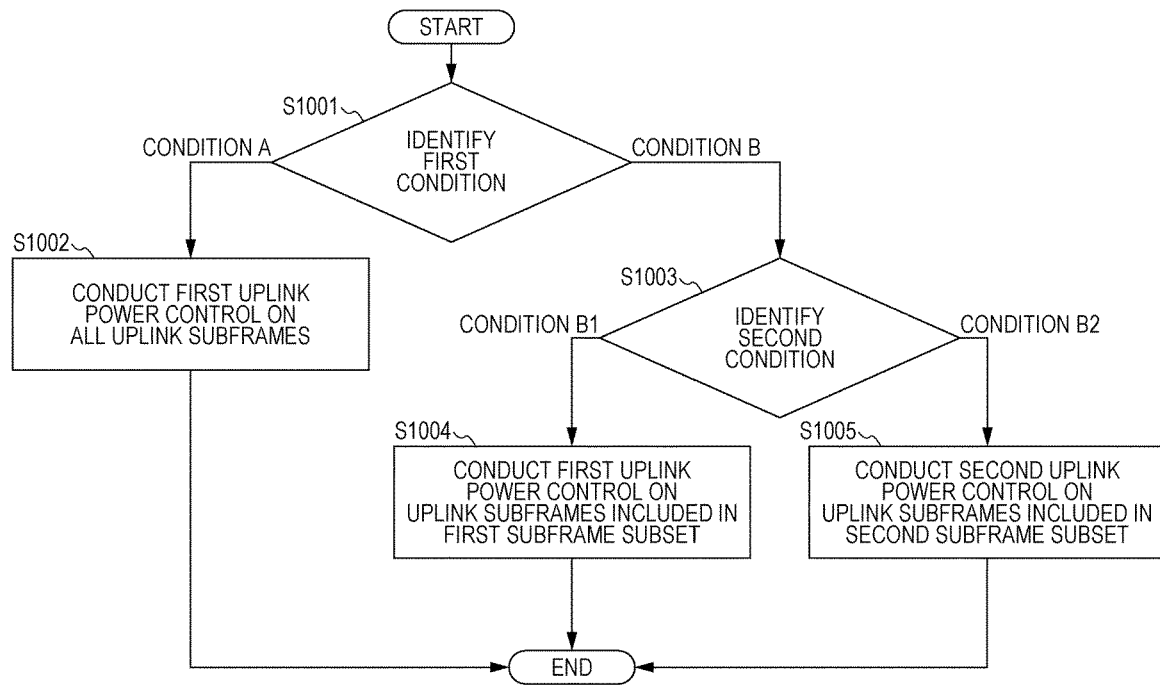
LG ELECTRONICS

Family 7/7 - FAMPAT - ©Questel

Title

(EP2996415)

Terminal device, communication method, and integrated circuit

Images**Publication numbers with kind code & date**

EP2996415	B1	2019-09-04	EP2996415
JP6396896	B2	2018-09-26	JP6396896
US9603100	B2	2017-03-21	US9603100
EP2996415	A4	2016-11-30	EP2996415
US20160081033	A1	2016-03-17	US20160081033
EP2996415	A1	2016-03-16	EP2996415
JPWO2014181836	A1	2014-11-13	JP2014181836W
WO2014/181836	A1	2014-11-13	WO2014181836

**Abstract**

(EP2996415)

Provided is a terminal device (2) that communicates with a base station device, including: a reception unit (205) that receives information related to a first configuration and/or information related to a second configuration, and a grant; and a transmission unit (207) that, in a case of an uplink signal being scheduled based on the grant, transmits the uplink signal to the base station device in an earliest uplink subframe on or after a designated subframe from a subframe in which the grant was detected, wherein in a case of the first configuration and the second configuration being set, the transmission unit (207) configures a transmit power control method for respective subframe subsets according to the type of grant.

Inventors

OUCHI WATARU

AIBA TATSUSHI

SUZUKI SHOICHI

Latest standardized assignees - inventors removed

SHARP