

Claims

[Claim-CLAIMS]

1}

. _____ A terminal apparatus comprising:

~~a receiver~~ _____ an upper layer processing unit configured to receive a configuration list related to a channel state information report and information related to a trigger of the channel state information report;

_____ a reception unit configured to receive, via a physical downlink control channel ~~for conveying,~~ downlink control information including a ~~first~~channel state information ~~request~~ field; and

_____ a ~~transmitter~~transmission unit configured to ~~report~~transmit the channel state information ~~(CSI) report based on the channel state information request field,~~ wherein

the first~~transmission unit is configured to transmit the channel state~~ information ~~field indicates first~~report of an activated downlink BWP related to the channel state information;

the first request field, in a case that the channel state information ~~indicates one- of multiple states,~~

each of the multiple states is associated with

a configuration related to one or multiple CSI reports,~~report is triggered~~ and

a configuration related to one or multiple CSI resources, and

~~the one of the multiple states is configured to be associated with a first serving cell and a bandwidth part (BWP) of the first serving cell.~~downlink BWP is active,

[Claim 2]

~~A base station apparatus comprising:~~

~~a transmitter~~ _____ the transmission unit is further configured not to transmit a ~~physical downlink control channel for conveying downlink control information- including a first~~state information field; and

~~a receiver configured to receive a report of a deactivated downlink BWP, in a case that~~ the channel state information (CSI) report, wherein is triggered and the downlink BWP is inactive,

~~the first~~ the configuration list related to the channel state information ~~field~~report indicates ~~first~~a plurality of channel state information trigger states,

~~the first information indicates one of multiple states,~~

~~each of the multiple states is associated with
a configuration related to one or multiple CSI reports, and
a configuration related to one or multiple CSI resources, and
the one of the multiple states is configured to be associated with a first serving
cell and a bandwidth part (BWP) of the first serving cell.~~

~~[Claim 3]~~

~~the information related to the trigger of the channel state information report
indicates a size N_{TS} of the channel state information request field in the downlink control
information,~~

~~each of code points of the channel state information request field is mapped to
one of the plurality of channel state information trigger states, one of the plurality of
channel state information trigger states is selected by a MAC processing unit of the
terminal apparatus, in a case that a number of channel state information trigger states in
the plurality of channel state information trigger states is greater than $2^{(N_{TS})}-1$,~~

~~the channel state information request field directly indicates the selected one of
the plurality of channel state information trigger states and a QCL assumption in a case
that the number of channel state information trigger states in the plurality of the channel
state information trigger states is equal to or less than $2^{(N_{TS})}-1$,~~

~~the MAC processing unit is configured to give an indication of the selected one
of the plurality of channel state information trigger states, and~~

~~one of the plurality of channel state information trigger states corresponding to
“1” in the indication is mapped to a code point of the channel state information request
field.~~

2. A communication method used for a terminal apparatus, the communication
method comprising ~~the steps of:~~

~~receiving a configuration list related to a channel state information report and
information related to a trigger of the channel state information report;~~

~~receiving, via a physical downlink control channel ~~for conveying, downlink~~
control information including a channel state information request field; and~~

~~transmitting the channel state information report based on the channel state
information request field, wherein~~

~~the channel state information report of an activated downlink BWP related to the
channel state information request field is transmitted, in a case that the channel state
information report is triggered and the downlink BWP is active,~~

~~a channel state information report of a deactivated downlink BWP is not~~

transmitted, in a case that the channel state information is triggered and the downlink BWP is inactive,

the configuration list related to the channel state information report indicates a plurality of channel state information trigger states,

the information related to the trigger of the channel state information report indicates a size N_{TS} of the channel state information request field in the downlink control information,

each of code points of the channel state information request field is mapped to one of the plurality of channel state information trigger states, one of the plurality of channel state information trigger states is selected by the terminal apparatus, in a case that a number of channel state information trigger states in the plurality of channel state information trigger states is greater than $2^{(N_{TS})}-1$,

the channel state information request field directly indicates the selected one of the plurality of channel state information trigger states and a QCL assumption in a case that the number of channel state information trigger states in the plurality of the channel state information trigger states is equal to or less than $2^{(N_{TS})}-1$,

giving an indication of the selected one of the plurality of channel state information trigger states, and

one of the plurality of channel state information trigger states corresponding to “1” in the indication is mapped to a code point of the channel state information request field.

3. A base station apparatus comprising:

an upper layer processing unit configured to transmit a configuration list related to a channel state information report and information related to a trigger of the channel state information report;

a transmission unit configured to transmit, via a physical downlink control channel, downlink control information including a ~~first~~ channel state information request field; and

reporting— a reception unit configured to receive the channel state information (CSI), wherein

the first information field indicates first information,

report based on the first information indicates one of multiple states,

each of the multiple states is associated with

a configuration related to one or multiple CSI reports, and

a configuration related to one or multiple CSI resources, and

~~the one of the multiple states is configured to be associated with a first serving cell and a bandwidth part (BWP) of the first serving cell.~~

[Claim 4]

~~A communication method for a base station apparatus, the communication method comprising the steps of:~~

~~transmitting a physical downlink control channel for conveying downlink control information including a first information field; and~~

~~reporting channel state information (CSI), wherein~~

~~the first information field indicates first information,~~

~~the first information indicates one of multiple states,~~

~~each of the multiple states is associated with~~

~~a configuration related to one or multiple CSI reports, and~~

~~a configuration related to one or multiple CSI resources, and~~

~~the one of the multiple states is configured to be associated with a first serving cell and a bandwidth part (BWP) of the first serving cell.~~

[Claim 5]

~~An integrated circuit mounted on a terminal apparatus, the integrated circuit comprising:~~

~~a receiving unit configured to receive a physical downlink control channel (PDCCH) for conveying downlink control information (DCI) including a first information field (CSI request field); and, wherein~~

~~a transmitting unit configured to report channel state information (CSI), wherein~~

~~the first information field indicates first information,~~

~~the first information indicates one of multiple states,~~

~~each of the multiple states is associated with~~

~~a configuration related to one or multiple CSI reports, and~~

~~a configuration related to one or multiple CSI resources, and~~

~~the one of the multiple states is configured to be associated with a first serving cell and a bandwidth part (BWP) of the first serving cell.~~

[Claim 6]

~~An integrated circuit mounted on a base station apparatus, the integrated circuit comprising:~~

~~a transmitting unit configured to transmit a physical downlink control channel (PDCCH) for conveying downlink control information (DCI) including a first information field (CSI request field); and~~

~~a receiving unit~~ the reception unit is configured to receive a channel state information (CSI) report, wherein report of an activated downlink BWP related to the channel state information request field in a case that the channel state information report is triggered and the downlink BWP is active,

~~the first information field indicates first information,~~
~~the first~~ the reception unit is further configured not to receive a channel state information report of a deactivated downlink BWP, in a case that the channel state information report is triggered and the downlink BWP is inactive,

~~the configuration list related to the channel state information report indicates a plurality of channel state information trigger states,~~

~~the information related to the trigger of the channel state information report indicates one of multiple states~~ a size NTS of the channel state information request field in the downlink control information,

~~each of the multiple states is associated with~~
~~a configuration related to one or multiple CSI reports, and~~
~~a configuration related to one or multiple CSI resources, and~~
~~the one of the multiple states is configured to be associated with a first serving cell and a bandwidth part (BWP) of the first serving cell.~~

each of code points of the channel state information request field is mapped to one of the plurality of channel state information trigger states, one of the plurality of channel state information trigger states is selected by a terminal apparatus, in a case that a number of CSI trigger states in the plurality of channel state information trigger states is greater than $2^{(NTS)-1}$,

the channel state information request field directly indicates the selected one of the plurality of channel state information trigger states and a QCL assumption, in a case that the number of CSI trigger states in the plurality of the channel state information trigger states is equal to or less than $2^{(NTS)-1}$, and

one of the plurality of channel state information trigger states corresponding to “1” in the indication is mapped to a code point of the channel state information request field in a case of indication of the selected one of the plurality of channel state information trigger states.