

CLAIMS

1. A method for implementing hybrid automatic repeat request, comprising:
 - receiving (810) downlink information in M1 downlink subframes of the primary cell and generating corresponding feedback information, and receiving downlink information in M2 downlink subframes of the secondary cell and generating corresponding feedback information, wherein the feedback information of M1 downlink subframes of the primary cell and the feedback information of M2 downlink subframes of the secondary cell are sent in a uplink subframe of the primary cell , wherein an uplink and downlink configuration adopted by the primary cell is different from an uplink and downlink configuration adopted by the secondary cell;
 - comparing (820) numbers of downlink subframes of the primary and secondary cells whose feedback information is sent in the uplink subframe of the primary cell;
 - determining (820) the maximum value of the numbers of downlink subframes of the primary and secondary cells whose feedback information is sent in the uplink subframe;
 - performing (830) filling on feedback information for a cell where the number of downlink subframes whose feedback information is sent in the uplink subframe of the primary cell is not the maximum value, so that the primary and secondary cells have feedback information corresponding to the same number of downlink subframes that is sent in the uplink subframe; and
 - sending, in the uplink subframe of the primary cell, the feedback information of the primary cell and the feedback information of the secondary cell.
2. The method according to claim 1, the sending the feedback information of the primary cell and the feedback information of the secondary cell comprises:
 - sending the feedback information of the primary cell and the feedback information of the secondary cell in the uplink subframe of the primary cell according to a channel selection mapping table that is in LTE release 10 and used to process a binding window with the size being the maximum value.
3. The method according to claim 1 or 2, the performing filling comprises:

if M1 is smaller than M2, filling M2-M1 pieces of Discontinuous Transmission, DTX, in the feedback information of the primary cell; or

if M2 is smaller than M1, filling M1-M2 pieces of Discontinuous Transmission, DTX, in the feedback information of the secondary cell.

4. The method according to claim 1 or 2, the filled feedback information comprises Discontinuous Transmission, DTX.

5. An user equipment, comprising a processor and a transmitter, wherein:
the processor is configured to:

receive downlink information in M1 downlink subframes of the primary cell and generate corresponding feedback information, and receive downlink information in M2 downlink subframes of the secondary cell and generate corresponding feedback information, wherein the feedback information of M1 downlink subframes of the primary cell and the feedback information of M2 downlink subframes of the secondary cell are sent in a uplink subframe of the primary cell , wherein an uplink and downlink configuration adopted by the primary cell is different from an uplink and downlink configuration adopted by the secondary cell;

compare numbers of downlink subframes of the primary and secondary cells whose feedback information is sent in the uplink subframe of the primary cell;

determine the maximum value of the numbers of downlink subframes of the primary and secondary cells whose feedback information is sent in the uplink subframe;

perform filling on feedback information for a cell where the number of downlink subframes whose feedback information is sent in the uplink subframe of the primary cell is not the maximum value, so that the primary and secondary cells have feedback information corresponding to the same number of downlink subframes that is sent in the uplink subframe; and

the transmitter is configured to send, in the uplink subframe of the primary cell, the feedback information of the primary cell and the feedback information of the secondary cell.

6. The user equipment according to claim 5, the transmitter is configured to send the

feedback information of the primary cell and the feedback information of the secondary cell by:

sending the feedback information of the primary cell and the feedback information of the secondary cell in the uplink subframe of the primary cell according to a channel selection mapping table that is in LTE release 10 and used to process a binding window with the size being the maximum value.

7. The user equipment according to claim 5 or 6, the transmitter is configured to perform the filling by:

if $M1$ is smaller than $M2$, filling $M2-M1$ pieces of Discontinuous Transmission, DTX, in the feedback information of the primary cell; or

if $M2$ is smaller than $M1$, filling $M1-M2$ pieces of Discontinuous Transmission, DTX, in the feedback information of the secondary cell.

8. The user equipment according to claim 5 or 6, the filled feedback information comprises Discontinuous Transmission, DTX.