

## CLAIMS

1. A data reception method, wherein the method comprises:

receiving, by a data reception apparatus, a first transport block and a first identifier,  
wherein the first identifier is used to indicate whether to switch, from non-hybrid automatic  
5 repeat request HARQ transmission to HARQ transmission, a HARQ process in which the first  
transport block is located,

the first identifier occupying one or more bits in downlink control information, DCI, that  
are invalid when the HARQ process uses the non-HARQ transmission, receiving, by the data  
reception apparatus, a radio resource control RRC message, wherein the RRC message is used to  
10 indicate that the HARQ process uses the non-HARQ transmission.

2. The method according to claim 1, wherein when the first identifier is flipped, the first  
identifier is used to indicate to switch the HARQ process from the non-HARQ transmission to  
the HARQ transmission; or

when the first identifier is not flipped, the first identifier is used to indicate to switch the  
15 HARQ process from the non-HARQ transmission to the HARQ transmission.

3. The method according to claim 1 or 2, wherein after the data reception apparatus  
receives the RRC message, the method further comprises:

setting, by the data reception apparatus, the HARQ process to the non-HARQ transmission  
after a preset periodicity starting from a moment at which the RRC message is received.

20 4. The method according to any one of claims 1 to 3, wherein the method further  
comprises:

setting, by the data reception apparatus, the HARQ process to the non-HARQ transmission  
after first preset duration starting from a moment at which the HARQ process is set to the HARQ  
transmission.

25 5. The method according to claim 4, wherein the method further comprises:

maintaining, by the data reception apparatus, the HARQ process as the non-HARQ  
transmission within second preset duration after the HARQ process is set to the non-HARQ  
transmission.

6. The method according to any one of claims 1 to 5, wherein the first identifier is a new  
30 data indicator NDI.

7. The method according to any one of claims 1 to 6, wherein after the data reception apparatus receives the first transport block and the first identifier, the method further comprises:

when the first identifier is used to indicate to switch the HARQ process from the non-HARQ transmission to the HARQ transmission, sending, by the data reception apparatus, a HARQ message used to indicate whether the first transport block is correctly decoded.

8. A data transmission method, wherein the method comprises:

sending, by a data transmission apparatus, a first transport block and a first identifier, wherein the first identifier is used to indicate whether to switch, from non-hybrid automatic repeat request HARQ transmission to HARQ transmission, a HARQ process in which the first transport block is located, and the first identifier occupying one or more bits in downlink control information, DCI, that are invalid when the HARQ process uses the non-HARQ transmission, sending, by the data transmission apparatus, a radio resource control RRC message, wherein the RRC message is used to indicate that the HARQ process uses the non-HARQ transmission.

9. The method according to claim 8, wherein when the first identifier is flipped, the first identifier is used to indicate to switch the HARQ process from the non-HARQ transmission to the HARQ transmission; or

when the first identifier is not flipped, the first identifier is used to indicate to switch the HARQ process from the non-HARQ transmission to the HARQ transmission.

10. The method according to claim 8 or 9, wherein after the data transmission apparatus sends the RRC message, the method further comprises:

setting, by the data transmission apparatus, the HARQ process to the non-HARQ transmission after a preset periodicity starting from a moment at which the RRC message is sent.

11. A data reception apparatus, wherein the data reception apparatus comprises one or more processors, the one or more processors are coupled to one or more memories, and the one or more memories store computer instructions; and

when the one or more processors execute the computer instructions, the data reception apparatus is enabled to perform the data reception method according to any one of claims 1 to 7.

12. A data transmission apparatus, wherein the data transmission apparatus comprises one or more processors, the one or more processors are coupled to one or more memories, and the one or more memories store computer instructions; and

when the one or more processors execute the computer instructions, the data transmission apparatus is enabled to perform the data transmission method according to any one of claims 8 to 10.

5 13. A computer-readable storage medium, wherein the computer-readable storage medium includes computer instructions which when executed by a computer, cause the computer to carry out the data reception method according to any one of claims 1 to 7 or the data transmission method according to any one of claims 8 to 10.

10 14. A data transmission system, wherein the data transmission system comprises at least the data reception apparatus according to claim 11 and the data transmission apparatus according to claim 12.