

CLAIMS

What is claimed is:

1. A ~~transmission control~~ method, ~~applied to~~ performed by an ~~apparatus~~ terminal in non-radio resource control, RRC, connected state, wherein the method comprises:

5 performing, when a first preset condition is met, an RRC connection resume procedure that is for a radio access network-based notification area update, RNAU, wherein

the first preset condition comprises that a second timer expires and a first timer does not run; or

10 the first preset condition comprises that the ~~terminal~~ apparatus receives a system information block 1, SIB1, of a first serving cell, the first serving cell does not belong to a configured radio access network-based notification area, RNA, and a first timer does not run; and

the first timer is started when the ~~apparatus~~ terminal initiates an RRC connection resume procedure that is for small data transmission, SDT, and the second timer is started when the ~~apparatus~~ terminal receives an RRC release message comprising duration of the second timer.

15 2. The method according to claim 1, wherein the method further comprises:

when the first timer runs, if an RRC reject message is received, stopping the first timer; and
if the second timer does not run, setting a first variable to a first value, wherein that the first variable is the first value indicates that there is a pending RNA update procedure.

20 3. The method according to claim 1, wherein the method further comprises:

when the first timer runs, if an RRC reject message is received, stopping the first timer; and
if the second timer does not run, performing the RRC connection resume procedure that is for the RNAU.

25 4. The method according to claim 1, wherein the method further comprises:

when the first timer runs, if an RRC reject message is received, stopping the first timer;
if the second timer does not run, starting a third timer; and
when the third timer expires, if the first timer does not run, performing the RRC connection resume procedure that is for the RNAU.

5. The method according to claim 1, wherein the method further comprises:

30 when the first timer expires, if the second timer does not run, setting a first variable to a first value, wherein that the first variable is the first value indicates that there is a pending RNA update

procedure.

6. The method according to claim 1, wherein the method further comprises:

when the first timer expires, if the second timer does not run, performing the RRC connection resume procedure that is for the RNAU.

~~7. The method according to claim 1, wherein the method further comprises:
when the first timer expires, if the second timer does not run, starting a third timer; and
when the third timer expires, if the first timer does not run, performing the RRC connection resume procedure that is for the RNAU.~~

~~8. The method according to any one of claims 5 to 7, wherein the non-radio resource control RRC connected state is an RRC inactive state; and after the first timer expires, the terminal is in RRC inactive state.~~

97. The method according to claim 1, wherein the method further comprises:

when the first timer runs, if cell reselection occurs, stopping the first timer;

receiving a SIB1 of a second serving cell, wherein the second serving cell is a serving cell obtained through the cell reselection that occurs on the apparatus terminal; and

when the SIB1 of the second serving cell is received, if the second serving cell belongs to the configured RNA, and the second timer does not run, setting a first variable to a first value, wherein that the first variable is the first value indicates that there is a pending RNA update procedure.

~~10~~8. The method according to claim 1, wherein the method further comprises:

when the first timer runs, if cell reselection occurs, stopping the first timer;

receiving a SIB1 of a second serving cell, wherein the second serving cell is a serving cell obtained through the cell reselection that occurs on the apparatus terminal; and

when the SIB1 of the second serving cell is received, if the second serving cell belongs to the configured RNA, and the second timer does not run, performing the RRC connection resume procedure that is for the RNAU.

~~11~~9. The method according to claim 1, wherein the method further comprises:

when the first timer runs, if cell reselection occurs, stopping the first timer;

receiving a SIB1 of a second serving cell, wherein the second serving cell is a serving cell obtained through the cell reselection that occurs on the apparatus terminal;

when the SIB1 of the second serving cell is received, if the second serving cell belongs to the

configured RNA, and the second timer does not run, starting a third timer; and

when the third timer expires, if the first timer does not run, performing the RRC connection resume procedure that is for the RNAU.

1210. The method according to any one of claims 97 to 911, wherein the non-radio resource control RRC connected state ~~comprises~~ is an RRC inactive state; and after cell reselection occurs on the ~~apparatus~~terminal, the ~~apparatus~~terminal is in RRC inactive state.

1311. The method according to claim 2, 5, or 97, wherein after the setting a first variable to a first value, the method further comprises:

if access barring is alleviated and an ~~upper layer non-access NAS-stratum~~ does not request an RRC layer to perform RRC connection resume, and if the first variable is the first value, performing the RRC connection resume procedure that is for the RNAU.

124. The method according to any one of claims 1 to 131, wherein the non-radio resource control RRC connected state ~~comprises~~ is the RRC inactive state.

135. An ~~apparatus~~terminal, ~~comprising a transceiver, a processor, and a memory, wherein the memory is configured to store a computer program, and the processor invokes the computer program to perform~~ the method according to any one of claims 1 to 12 ~~is implemented by the apparatus~~4.

146. A computer storage medium, wherein the computer storage medium stores a computer program; and when the computer program is executed ~~by a processor~~, the method according to any one of claims 1 to 124 is implemented.

15. A computer program product, wherein when the computer program product is executed, the method according to any one of claims 1 to 14 is implemented.