

What is claimed is:

1. A method of operation of a wireless device in a cellular communications system, the method comprising:
transmitting (700), to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request triggered by a RAN-based Notification Area Update, RNAU;
in response to the RRC resume request, receiving (702), from the RAN node, an RRC resume reject message comprising a wait timer value;
starting (704) a wait timer initialized with the wait timer value; and
sending (708) the RNAU when the wait timer has expired.
2. The method of claim 1 further comprising monitoring (706) for RAN paging and core network paging while the wait timer is running.
3. The method of claim 2 further comprising, upon receiving a RAN paging or core network paging while the wait timer is running, responding (706) to the RAN paging or core network paging.
4. The method of any one of claims 1 to 3 wherein the RNAU is a periodic RNAU.
5. The method of any one of claims 1 to 3 wherein the RNAU is due to mobility.
6. A wireless device for a cellular communications system, the wireless device adapted to:
transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request triggered by a RAN-based Notification Area Update, RNAU;
in response to the RRC resume request, receive, from the RAN node, an RRC resume reject message comprising a wait timer value;
start a wait timer initialized with the wait timer value; and
send the RNAU when the wait timer has expired.
7. The wireless device of claim 6 wherein the wireless device is further adapted to monitor for RAN paging and core network paging while the wait timer is running.
8. The wireless device of claim 7 wherein the wireless device is further adapted to, upon

receiving a RAN paging or core network paging while the wait timer is running, respond to the RAN paging or core network paging.

9. The wireless device of any one of claims 6 to 8 wherein the RNAU is a periodic RNAU.

10. The wireless device of any one of claims 6 to 8 wherein the RNAU is due to mobility.

11. A wireless device for a cellular communications system, the wireless device comprising:
radio front-end circuitry; and
processing circuitry associated with the radio front-end circuitry, the processing circuitry configured to cause the wireless device to:
transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request triggered by a RAN-based Notification Area Update, RNAU;
in response to the RRC resume request, receive, from the RAN node, an RRC resume reject message comprising a wait timer value;
start a wait timer initialized with the wait timer value; and
send the RNAU when the wait timer has expired.

12. The wireless device of claim 11 wherein the processing circuitry is further configured to cause the wireless device to monitor for RAN paging and core network paging while the wait timer is running.

13. The wireless device of claim 12 wherein the processing circuitry is further configured to cause the wireless device to, upon receiving a RAN paging or core network paging while the wait timer is running, respond to the RAN paging or core network paging.

14. The wireless device of any one of claims 11 to 13 wherein the RNAU is a periodic RNAU.

15. The wireless device of any one of claims 11 to 13 wherein the RNAU is due to mobility.

16. A method of operation of a wireless device in a cellular communications system, the method comprising:

transmitting (800), to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;

in response to the RRC resume request, receiving (802), from the RAN node, an RRC resume reject message comprising a wait timer value;

starting (804) a wait timer initialized with the wait timer value;

performing (806) a cell reselection to a target cell while the wait timer is running; and

upon performing the cell reselection to the target cell while the wait timer is running, re-initiating (810) a pending Access Stratum, AS, layer procedure in the target cell.

17. The method of claim 16 further comprising:

determining (808) whether an upper layer event has occurred;

wherein re-initiating (810) the pending AS layer procedure in the target cell comprises re-initiating (810) the pending AS layer procedure in the target cell if an upper layer event has occurred.

18. The method of claim 17 further comprising discarding (812) the pending AS layer procedure if an upper layer event has occurred.

19. The method of claim 17 or 18 wherein the upper layer event is mobile originating data or mobile originating signaling.

20. The method of any one of claims 16 to 19 wherein the pending AS layer procedure is a RAN-based Notification Area Update, RNAU, procedure.

21. A wireless device for a cellular communications system, the wireless device adapted to:

transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;

in response to the RRC resume request, receive, from the RAN node, an RRC resume reject message comprising a wait timer value;

start a wait timer initialized with the wait timer value;

perform a cell reselection to a target cell while the wait timer is running; and
upon performing the cell reselection to the target cell while the wait timer is running, re-initiate a pending Access Stratum, AS, layer procedure in the target cell.

22. The wireless device of claim 21 wherein the wireless device is further adapted to perform the method of any one of claims 17 to 20.

23. A wireless device for a cellular communications system, the wireless device comprising:
radio front-end circuitry; and
processing circuitry associated with the radio front-end circuitry, the processing circuitry configured to cause the wireless device to:
transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;
in response to the RRC resume request, receive, from the RAN node, an RRC resume reject message comprising a wait timer value;
start a wait timer initialized with the wait timer value;
perform a cell reselection to a target cell while the wait timer is running; and
upon performing the cell reselection to the target cell while the wait timer is running, re-initiate a pending Access Stratum, AS, layer procedure in the target cell.

24. The wireless device of claim 23 wherein the processing circuitry is further configured to cause the wireless device to perform the method of any one of claims 17 to 20.

25. A method of operation of a wireless device in a cellular communications system, the method comprising:
transmitting (900), to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;
starting (902) a timer;
performing (904) a cell reselection to a target cell while the timer is running; and
upon performing the cell reselection to the target cell while the timer is running, re-initiating (908) a pending Access Stratum, AS, layer procedure in the target cell.

26. The method of claim 25 wherein the timer is a timer that is started upon initiation of an RRC resume procedure during which the RRC resume request is transmitted.

27. The method of claim 25 or 26 further comprising:
determining (906) whether an upper layer event has occurred;
wherein re-initiating (908) the pending AS layer procedure in the target cell comprises re-initiating (908) the pending AS layer procedure in the target cell if an upper layer event has occurred.

28. The method of claim 27 further comprising discarding (910) the pending AS layer procedure if an upper layer event has occurred.

29. The method of claim 27 or 28 wherein the upper layer event is mobile originating data or mobile originating signaling.

30. The method of any one of claims 25 to 29 wherein the pending AS layer procedure is a RAN-based Notification Area Update, RNAU, procedure.

31. A wireless device for a cellular communications system, the wireless device adapted to:
transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;
start a timer;
perform a cell reselection to a target cell while the timer is running; and
upon performing the cell reselection to the target cell while the timer is running, re-initiate a pending Access Stratum, AS, layer procedure in the target cell.

32. The wireless device of claim 31 wherein the wireless device is further adapted to perform the method of any one of claims 26 to 30.

33. A wireless device for a cellular communications system, the wireless device comprising:
radio front-end circuitry; and

processing circuitry associated with the radio front-end circuitry, the processing circuitry configured to cause the wireless device to:

- transmit, to a Radio Access Network, RAN, node, a Radio Resource Control, RRC, resume request;
- start a timer;
- perform a cell reselection to a target cell while the timer is running; and
- upon performing the cell reselection to the target cell while the timer is running, re-initiate a pending Access Stratum, AS, layer procedure in the target cell.

34. The wireless device of claim 33 wherein the processing circuitry is further configured to cause the wireless device to perform the method of any one of claims 26 to 30.