

CLAIMS

What is claimed is:

1. A method for use in a wireless transmit/receive unit (WTRU), the method comprising:

receiving, via a primary connectivity radio (PCR) transceiver, a frame that includes a wake-up radio (WUR) operation element having a first counter value;

deactivating the PCR transceiver and activating a wake-up radio (WUR) transceiver, wherein the PCR transceiver enters into a doze state and the WUR transceiver is in an awake state;

receiving, via the WUR transceiver in the awake state, a WUR frame that includes a second counter value indicating that an update of a plurality of basic service set (BSS) parameters associated with the PCR transceiver's BSS is available; and

on a condition that the second counter value is different than the first counter value, activating the PCR transceiver to receive a beacon frame including an update of the plurality of BSS parameters, wherein the PCR transceiver enters into an awake state.

2. The method of claim 1, wherein the frame is a beacon frame or a WUR action frame.

3. The method of claim 2, wherein the action frame is a WUR mode setup frame.

4. The method of claim 1, wherein the WUR transceiver is a companion radio.

5. The method of claim 1, wherein the WUR frame is a broadcast WUR wake-up frame.

6. The method of claim 1, further comprising:

maintaining a counter variable; and

updating a value of the counter variable to the first counter value in the WUR operation element.

7. The method of claim 1, further comprising:

transmitting, via the PCR transceiver in the awake state, a response frame in response to the WUR frame.

8. A wireless transmit/receive unit (WTRU) comprising:

a primary connectivity radio (PCR) transceiver configured to receive a frame that includes a wake-up radio (WUR) operation element having a first counter value;

a wake-up radio (WUR) transceiver operatively coupled to the PCR transceiver;

a processor configured to deactivate the PCR transceiver and activate the WUR transceiver, wherein the PCR transceiver enters into a doze state and the WUR transceiver is in an awake state;

the WUR transceiver in the awake state further configured to receive, a WUR frame that includes a second counter value indicating that an update of a plurality of basic service set (BSS) parameters associated with the PCR transceiver's BSS is available; and

the processor further configured to, on a condition that the second counter value is different than the first counter value, activate the PCR transceiver to receive a beacon frame including an update of the plurality of BSS parameters, wherein the PCR transceiver enters into an awake state.

9. The WTRU of claim 8, wherein the frame is a beacon frame or a WUR action frame.
10. The WTRU of claim 9, wherein the action frame is a WUR mode setup frame.
11. The WTRU of claim 8, wherein the WUR transceiver is a companion radio.
12. The WTRU of claim 8, wherein the WUR frame is a broadcast WUR wake-up frame.
13. The WTRU of claim 8, wherein the processor is further configured to:
maintain a counter variable; and
update a value of the counter variable to the first counter value in the WUR operation element.
14. The WTRU of claim 8, wherein the PCR transceiver in the awake state is further configured to transmit a response frame in response to the WUR frame.