

CLAIMS

What is claimed is:

1. A wireless transmit/receive unit (WTRU) comprising:
at least one antenna;
a first transceiver operatively coupled to the at least one antenna; and
a second transceiver operatively coupled to the at least one antenna, wherein:
the at least one antenna and the first transceiver are configured to receive a first signal from a network, wherein the received first signal comprises one or more sections of different time duration and amplitudes, wherein the one or more sections have a same energy;
the first transceiver is further configured to extract energy from the received first signal;
the first transceiver is further configured to decode an energy signature of the received first signal by comparing a separation in time between energy threshold events;
the first transceiver is further configured to, on a condition that the decoded energy signature matches a configured energy signature, activate the second transceiver; and
the at least one antenna and the second transceiver are configured to receive a second signal from the network.
2. The WTRU of claim 1, wherein the energy threshold events are generated by determining that an amount of the extracted energy exceeds a threshold.
3. The WTRU of claim 2, wherein the separation in time between energy threshold events is based on a configured value of the threshold.
4. The WTRU of claim 1, wherein the energy threshold events are converted to a digital signal based on a transfer of the extracted energy.
5. The WTRU of claim 1, wherein the first transceiver comprises a passive receiver that is powered only by the received first signal.
6. The WTRU of claim 1, wherein the second transceiver is powered by a battery.
7. The WTRU of claim 1, wherein the second transceiver comprises a primary transceiver.
8. The WTRU of claim 1, wherein the first transceiver is operatively coupled to a first antenna of the at least one antenna and the second transceiver is operatively coupled to a second antenna of the at least one antenna.
9. The WTRU of claim 1, wherein the WTRU is configured to extract the energy from the received first signal and compare a separation in time between energy threshold events concurrently.
10. The WTRU of claim 1, wherein the configured energy signature comprises a start sequence that is required to initiate the activation of the second transceiver.
11. A method for use in a wireless transmit/receive unit (WTRU), the method comprising:

receiving a first signal from a network using a first transceiver, wherein the received first signal comprises one or more sections of different time duration and amplitudes, wherein the one or more sections have a same energy;

extracting energy from the received first signal;

decoding an energy signature of the received first signal by comparing a separation in time between energy threshold events;

activating a second transceiver on a condition that the decoded energy signature matches a configured energy signature; and

receiving a second signal from the network using the second transceiver.

12. The method of claim 11, further comprising:

generating the energy threshold events by determining that an amount of the extracted energy exceeds a threshold.

13. The method of claim 12, wherein the separation in time between energy threshold events is based on a configured value of the threshold.

14. The method of claim 11, further comprising:

converting the energy threshold events to a digital signal based on a transfer of the extracted energy.

15. The method of claim 11, wherein the first transceiver comprises a passive receiver that is powered only by the received first signal.

16. The method of claim 11, wherein the second transceiver is powered by a battery.

17. The method of claim 11, wherein the second transceiver comprises a primary transceiver.

18. The WTRU of claim 1, wherein the configured energy signature is received from a network.

19. The WTRU of claim 4, wherein the transfer of the extracted energy is from a temporary storage element to a permanent storage element.

20. The method of claim 11, further comprising receiving the configured energy signature from a network.

21. The method of claim 14, wherein the transfer of the extracted energy is from a temporary storage element to a permanent storage element.