

While the invention has been described, disclosed, illustrated and shown in various terms of certain embodiments or modifications which it has presumed in practice, the scope of the invention is not intended to be, nor should it be deemed to be, limited thereby and such other modifications or embodiments as may be suggested by the teachings herein are particularly reserved especially as they fall within the breadth and scope of the claims here appended.

The invention claimed is:

1. A method for the reduction of transmit processing in response to a received packet in a communications system comprising:

generating a plurality of transmit control frames for responding to received packets;
 generating transmit waveform samples from the generated plurality of transmit control frames;
 storing the transmit waveform samples in buffer memory;
 receiving a packet;
 determining a transmit waveform sample associated with the received packet; and
 transmitting the determined transmit waveform samples.

2. A method as in claim 1, wherein the generated transmit control frame contains data which is learned over time from the communications system.

3. A method as in claim 1, wherein the generated transmit control frame contains a duration field.

4. A method as in claim 3, wherein the duration field is set to a maximum length packet exchange for a specific data rate.

5. A method as in claim 1, wherein the generated transmit control frames contain power management mode information.

6. A method as in claim 1, wherein the generation of the transmit waveform samples varies by data rate.

7. A method as in claim 2, wherein the learned data are transmit addresses of received packets.

8. A method as in claim 1, in which the communications system is wireless.

9. A method as in claim 1, in which the communications system is IEEE 802.11.

10. A method as in claim 1, in which the communications system is Bluetooth.

11. A method as in claim 1, in which the communications system is IEEE 802.15.

12. A method for the reduction of transmit processing in response to a received packet in a communications system comprising the steps of:

maintaining in memory a plurality of transmit waveform samples;
 generating new transmit waveform samples in response to detection of new transmit addresses in the system;
 saving the new transmit samples to the memory;
 indexing the memory based on receiving a specific transmit address in a received packet;
 determining an appropriate transmit waveform sample from the indexed memory; and
 transmitting the appropriate transmit waveform sample.

13. A method as in claim 12, wherein the transmit waveform samples vary by data rate.

14. A method as in claim 12, wherein the indexing of memory varies by data rate.

15. A method as in claim 12, in which the communications system is wireless.

16. A method as in claim 12, in which the communications system is IEEE 802.11.

17. A method as in claim 12, in which the communications system is IEEE 802.15.

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