

11. A non-transitory computer-readable information storage media, having stored thereon instructions, that when executed by one or more processors in a transceiver, cause to be performed a method comprising:

~~generating~~receiving, by a wireless Orthogonal Frequency Division Multiplexing (OFDM) communications ~~transmitter~~receiver over a wireless communication channel, a first packet type comprising a first header field, wherein the first header field comprises two parts, a first part comprising a first set of header bits of the first header field and a second part comprising a second set of header bits of the first header field, wherein the first set of header bits of the first header field is different than the second set of header bits of the first header field;

~~generating~~demodulating, by ~~an encoder and a modulator~~demodulator, a first OFDM symbol followed by a second OFDM symbol, wherein the first OFDM symbol is used to ~~transmit~~receive the first part of the first header field and the second OFDM symbol is used to ~~transmit~~receive the second part of the first header field;

~~transmitting~~receiving, by the wireless OFDM communications ~~transmitter, the first packet type~~receiver over a wireless communication channel;

~~generating, by the wireless OFDM communications transmitter~~, a second packet type comprising a second header field, wherein the second header field comprises four parts, a first part comprising a first set of header bits of the second header field, a second part comprising a second set of header bits of the second header field, a third part comprising a third set of header bits of the second header field and a fourth part comprising a fourth set of header bits of the second header field,

wherein the first set of header bits of the second header field is the same as the second set of header bits of the second header field, wherein the third set of header bits of the second header field is the same as the fourth set of header bits of the second header field; and

~~generating~~demodulating, by the ~~encoder and the modulator~~demodulator, a first OFDM symbol followed by a second OFDM symbol followed by a third OFDM symbol followed by a fourth OFDM symbol, wherein the first OFDM symbol is used to ~~transmit~~receive the first part of the second header field, the second OFDM symbol is used to ~~transmit~~receive the second part of the second header field, the third OFDM symbol is used to ~~transmit~~receive the third part of the second header field, the fourth OFDM symbol is used to ~~transmit~~receive the fourth part of the second header field,

wherein the second set of header bits of the second header field ~~transmitted~~received using the second OFDM symbol are ~~transmitted~~received in a different order than the first set of header bits of the second header field ~~transmitted~~received using the first OFDM symbol, and

wherein the fourth set of header bits of the second header field ~~transmitted~~received using the fourth OFDM symbol are ~~transmitted~~received in a different order than the third set of header bits of the second header field ~~transmitted~~received using the third OFDM symbol; and.

~~transmitting, by the wireless OFDM communications transmitter, the second packet type over the wireless communication channel.~~

12. The media of claim 11, wherein the ~~transmission~~reception of the same header bits in the second OFDM symbol provides diversity to increase a likelihood of correctly ~~communicating~~receiving header information of the second packet type.

313. The media of claim 11, wherein the ~~transmission~~reception of the same header bits in the fourth OFDM symbol provides diversity to increase a likelihood of correctly ~~communicating~~receiving header information of the second packet type.

515. The media of claim 11, wherein the wireless transceiver supports one or more wireless standards.

717. The media of claim 11, wherein the first packet type is ~~transmitted~~received in a first channel bandwidth and the second packet type is ~~transmitted~~received in a second channel bandwidth, wherein the first channel bandwidth is at least two times wider than the second channel bandwidth.

818. The media of claim 717, wherein the ~~transmission~~reception of the same header bits in the second OFDM symbol provides diversity to increase a likelihood of correctly ~~communicating~~receiving header information of the second packet type.

919. The media of claim 717, wherein the ~~transmission~~reception of the same header bits in the fourth OFDM symbol provides diversity to increase a likelihood of correctly ~~communicating~~receiving header information of the second packet type.