CLAIMS

1. A method comprising:

generating an IEEE 802.11 multistatic sensing PPDU for transmission, the IEEE 802.11 multistatic sensing PPDU comprising:

a data field carrying a number EDMG_LENGTH of data octets;

a sync field following the data field and having a same duration as a field carrying a length of SYNC_LENGTH data as measured in octets, the sync field including a number of Sync subfields and a Sync_PAD subfield with N_pad_SYM of padding symbols;

a PSDU Length field included in an EDMG-Header-A of the PPDU, the PSDU Length field set by the apparatus to have a value equal to:

$$LENGTH = EDMG_LENGTH + SYNC_LENGTH$$

the length SYNC_LENGTH being related to the number N_pad_SYM via equations:

N_blk_SYNC = (TRN_BL × 18 × N_STA + N_pad_SYM) / 512;

$N_{CW_SYNC} = (512 - N_{GI}) \times N_blk_SYNC \times N_CBPS \times N_{CB}/L_{CW}$;

SYNC_LENGTH $= N_{CW_SYNC} \cdot \frac{L_{CW}}{\rho} \cdot R/8$,

the number N_pad_SYM being set such that SYNC_LENGTH is an integer value;

wherein:

TRN_BL is specified value indicative of a length of Golay sequences used in the PPDU;

N_STA is a number of EDMG multistatic sensing stations (STAs) to which the multistatic sensing PPDU is transmitted;

L_{CW} is a specified low density parity check (LDPC) codeword length for the PPDU;

ρ is a specified repetition factor for the PPDU;

R is a specified code rate for the PPDU;

N_{GI} is a number of symbols in each one of a plurality of guard intervals interspersed with symbol blocks of the data field;

N_{CBPS} is a number of coded bits per constellation symbol and is determined based on a specified modulation and coding scheme (MCS) for the PPDU; and

N_{CB} is a number of channels bonded together to create a single channel used for transmission of the PPDU.

2. The method of claim 1, wherein at least one of L_{CW}, ρ, R and the MCS are specified in the EDMG-Header-A.

3. The method of claim 1 or 2, wherein TRN_BL is indicated by a TRN subfield sequence length field the EDMG-Header-A.

4. The method of any one of claims 1 to 3, wherein the padding symbols are located in a sync pad subfield forming a last part of the sync field.

5. The method of any one of claims 1 to 4, wherein the number N_pad_SYM is a minimum value among possible values set such that the length SYNC_LENGTH is an integer value.

6. The method of any one of claims 1 to 5, wherein the length SYNC_LENGTH as measured in octets specifies an equivalent number of octets which, upon encoding and modulation in a same manner as octets of the data field, would result in a number of modulated symbols having a total duration equivalent to a duration of the sync field.

7. The method of any one of claims 1 to 6, wherein N_{GI} equals 64.

8. The method of any one of claims 1 to 7, wherein N_{GI} is specified by a GI length field of an L-Header field of the PPDU.

9. The method of any one of claims 1 to 8, further comprising transmitting the multistatic sensing PPDU.

10. A method comprising:

receiving an IEEE 802.11 multistatic sensing PPDU, the IEEE 802.11 multistatic sensing PPDU comprising:

a data field carrying a number EDMG_LENGTH of data octets;

a sync field following the data field and having a same duration as a field carrying a length of SYNC_LENGTH data as measured in octets, the sync field including a number of Sync subfields and a Sync_PAD subfield with N_pad_SYM of padding symbols;

a PSDU Length field included in an EDMG-Header-A of the PPDU, the PSDU Length field set by the apparatus to have a value equal to:

$$LENGTH = EDMG_LENGTH + SYNC_LENGTH$$

the length SYNC_LENGTH being related to the number N_pad_SYM via equations:

N_blk_SYNC = (TRN_BL × 18 × N_STA + N_pad_SYM) / 512;

$N_{CW_SYNC} = (512 - N_{GI}) \times N_blk_SYNC \times N_CBPS \times N_{CB}/L_{CW}$;

SYNC_LENGTH $= N_{CW_SYNC} \cdot \frac{L_{CW}}{\rho} \cdot R/8$,

the number N_pad_SYM being set such that SYNC_LENGTH is an integer value,

wherein:

TRN_BL is specified value indicative of a length of Golay sequences used in the PPDU;

N_STA is a number of EDMG multistatic sensing stations (STAs) to which the multistatic sensing PPDU is transmitted;

L_{CW} is a specified low density parity check (LDPC) codeword length for the PPDU;

ρ is a specified repetition factor for the PPDU;

R is a specified code rate for the PPDU;

N_{GI} is a number of symbols in each one of a plurality of guard intervals interspersed with symbol blocks of the data field;

N_{CBPS} is a number of coded bits per constellation symbol and is determined based on a specified modulation and coding scheme (MCS) for the PPDU; and

N_{CB} is a number of channels bonded together to create a single channel used for transmission of the PPDU.

11. The method of claim 10, wherein at least one of L_{CW}, ρ, R and the MCS are specified in the EDMG-Header-A.

12. The method of claim 10 or 11, wherein TRN_BL is indicated by a TRN subfield sequence length field the EDMG-Header-A.

13. An apparatus comprising means to perform the method of any one of claims 1 to 9.

14. An apparatus comprising means to perform the method of any one of claims 10 to 12.

15. A computer program product comprising instructions to perform the method of any one of claims 1 to 12.