What is claimed is:

1. An apparatus of decoding a motion vector, the apparatus comprising:

a merge candidate generator (2770) configured to determine whether motion vectors of spatial prediction units that are spatially collocated to a current prediction unit and motion vectors of temporal prediction units that are temporally collocated to the current prediction unit are available and to determine the available motion vectors as motion vector predictor candidates;

characterized by:

when the number of the motion vector predictor candidates is less than a predetermined number ‘n’, where n is an integer, the merge candidate generator (2770) generates at least one combined bi-directional motion vector by combining an available motion vector, from among the available motion vectors, which indicates a block of picture in reference picture list 0 and an available motion vector, from among the available motion vectors, which indicates a block of picture in reference picture list 1;

adds the at least one combined bi-directional motion vector to the motion vector predictor candidates; and

when the number of the motion vector predictor candidates is less than the predetermined number 'n', adds a motion vector having a predetermined component value to the motion vector predictor candidates so that a total number of motion vector predictor candidates is the predetermined number n, wherein the predetermined component value is (0, 0),

the apparatus further comprising a motion vector decoder (2780) configured to obtain information indicating a motion vector predictor among the motion vector predictor candidates from a bitstream and to obtain the motion vector predictor of the current prediction unit based on the information.

2. An apparatus of encoding a motion vector, the apparatus comprising:

a merge candidate generator (1460) configured to determine whether motion vectors of spatial prediction units that are spatially collocated to a current prediction unit and motion vectors of temporal prediction units that are temporally collocated to the current prediction unit are available and to determine the available motion vectors as motion vector predictor candidates;

characterized by:

when the number of the motion vector predictor candidates is less than a predetermined number 'n', where n is an integer, the merge candidate generator (1460) generates at least one combined bi-directional motion vector by combining an available motion vector, from among the available motion vectors, which indicates a block of picture in reference picture list 0 and an available motion vector, from among the available motion vectors, which indicates a block of picture in reference picture list 1;

adds the at least one combined bi-directional motion vector to the motion vector predictor candidates; and

when the number of the motion vector predictor candidates is less than the predetermined number 'n', adds a motion vector having a predetermined component value to the motion vector predictor candidates so that a total number of motion vector predictor candidates is the predetermined number n, wherein the predetermined component value is (0, 0),

the apparatus further comprising a motion vector encoder (1470) configured to determine a motion vector predictor of the current prediction unit among the motion vector predictor candidates and to encode information indicating the motion vector predictor.

3. A non-transitory computer-readable medium for recording a bitstream, the bitstream comprising:

information indicating a motion vector predictor of a current prediction unit among motion vector predictor candidates,

wherein the motion vector predictor candidates are generated by determining whether motion vectors of spatial prediction units that are spatially collocated to the current prediction unit and motion vectors of temporal prediction units that are temporally collocated to the current prediction unit are available and determining the available motion vectors as motion vector predictor candidates,

characterized by:

the motion vector predictor candidates are generated by:

when the number of the motion vector predictor candidates is less than a predetermined number 'n', where n is an integer, generating at least one combined bi-directional motion vector by combining an available motion vector, from among the available motion vectors, which indicates a block of picture in reference picture list 0

and an available motion vector, from among the available motion vectors, which indicates a block of picture in reference picture list 1;

adding the at least one combined bi-directional motion vector to the motion vector predictor candidates; and

when the number of the motion vector predictor candidates is less than the predetermined number 'n', adding a motion vector having a predetermined component value to the motion vector predictor candidates so that a total number of motion vector predictor candidates is the predetermined number n, wherein the predetermined component value is (0, 0).