CLAIMS

1. A method, comprising:

in a device configured to receive a bit stream of a video:

decoding, by a decoder, the bit stream based on a video parameter set (VPS) syntax structure, wherein a byte-alignment syntax is under a condition of a VPS extension flag in the VPS syntax structure,

wherein the byte-alignment syntax is associated with a byte-alignment;

determining a value of the VPS extension flag;

executing the byte-alignment based on the value of the VPS extension flag that is equal to one; and

executing a VPS extension function based on the byte-alignment.

2. An apparatus, comprising:

a memory configured to store a video parameter set (VPS) application configured to decode a bit stream; and

a processor configured to execute the VPS application to:

decode the bit stream based on a VPS syntax structure, wherein a byte-alignment syntax is under a condition of a VPS extension flag in the VPS syntax structure,

wherein the byte-alignment syntax is associated with a byte-alignment,

determine a value of the VPS extension flag;

execute the byte-alignment based on the value of the VPS extension flag that is equal to one; and

execute a VPS extension function based on the byte-alignment.

3. The method of claim 1,

wherein a VPS function is under the condition of the VPS extension flag in the VPS syntax structure, and

wherein the VPS function is used for determining VPS data.

4. The method of claim 1,

wherein a VPS function is present after the byte-alignment syntax in the VPS syntax structure, and

wherein the byte-alignment syntax used for determination of VPS data is under the condition of the VPS extension flag.

5. The method of claim 1, further comprising storing, in a storage unit, a VPS application configured to decode the bit stream.

6. The method of claim 1, further comprising generating VPS data based on the VPS syntax structure, wherein the VPS data includes HEVC extension information in one of scalable video coding, multi-view coding or 3D video coding areas.

7. The method of claim 6, wherein the VPS data further includes mixed signaling information.

8. The method of claim 1, wherein the VPS extension function is under the condition of the VPS extension flag in the VPS syntax structure.