~~WHAT IS CLAIMED IS:~~CLAIMS

1. A method for video coding performed by at least one processor, the method comprising:

obtaining video data;

parsing a ~~video parameter set (VPS)~~high level -syntax of the video data;

determining whether a value of a syntax element of the high level~~VPS~~ syntax indicates a picture order count (POC) value of an access unit (AU) of the video data; ~~and~~

setting at least one of a plurality of pictures, slices, and tiles of the video data to the AU based on the value of the syntax element;

determining whether the high level syntax comprises a flag indicating whether at least one of the pictures is divided into a plurality of sub-regions; and

setting, in response to determining that the high level syntax comprises the flag and that the flag indicates that the at least one of the pictures is not divided into the plurality of sub-regions, an input picture size of the at least one of the pictures to a coded picture size signaled in a sequence parameter set (SPS) of the video data.

2. The method for video coding according to claim 1, wherein the value of the syntax element indicates a number consecutive ones of the plurality of pictures, slices, and tiles of the video data to be set to the AU.

3. The method for video coding according to claim 1, wherein the high level~~VPS~~ syntax is contained in a video parameter set (VPS) of the video data and identifying a number of at least one type of enhancement layers of the video data.

4. The method for video coding according to claim 1, further comprising:

determining whether the high level ~~VPS~~ syntax comprises a flag indicating whether the POC value increases uniformly per AU.

5. The method for video coding according to claim 4, further comprising:

calculating, in response to determining that ~~the~~ a video parameter set (VPS) comprises the flag and that the flag indicates that the POC value does not increase uniformly per AU, an access unit count (AUC) from the POC value and a picture level value of the video data.

6. The method for video coding according to claim 4, further comprising:

calculating, in response to determining that a video parameter set~~the~~ (VPS) comprises the flag and that the flag indicates that the POC value does increase uniformly per AU, an access unit count (AUC) from the POC value and a sequence level value of the video data.

~~7. The method for video coding according to claim 1, further comprising:~~

~~determining whether the VPS syntax comprises a flag indicating whether at least one of the pictures is divided into a plurality of sub-regions.~~

~~8. The method for video coding according to claim 7, further comprising:~~

~~setting, in response to determining that the VPS syntax comprises the flag and that the flag indicates that the at least one of the pictures is not divided into the plurality of sub-regions,~~

~~an input picture size of the at least one of the pictures to a coded picture size signaled in a sequence parameter set (SPS) of the video data.~~

~~9~~7. The method for video coding according to claim ~~7~~1, further comprising:

determining, in response to determining that the high level~~VPS~~ syntax comprises the flag and that the flag indicates that the at least one of the pictures is divided into the plurality of sub-regions, whether the SPS comprises syntax elements signaling offsets corresponding to a layer of the video data.

~~10~~8. The method for video coding according to claim ~~9~~7, wherein the offsets comprise an offset in an width direction and an offset in a height direction.

~~11~~9. An apparatus for video coding, the apparatus comprising:

at least one memory configured to store computer program code;

at least one processor configured to access the computer program code and operate as instructed by the computer program code, the computer program code including:

obtaining code configured to cause the at least one processor to obtain video data;

parsing code configured to cause the at least one processor to parse a high level ~~video parameter set (VPS)~~ syntax of the video data;

determining code configured to cause the at least one processor to determine whether a value of a syntax element of the high level~~VPS~~ syntax indicates a picture order count (POC) value of an access unit (AU) of the video data; and

setting code configured to cause the at least one processor to set at least one of a plurality of pictures, slices, and tiles of the video data to the AU based on the value of the syntax element,

wherein the determining code is further configured to cause the at least one processor to determine whether the high level syntax comprises a flag indicating whether at least one of the pictures is divided into a plurality of sub-regions; and

wherein the setting code is further configured to cause the at least one processor to set, in response to determining that the high level syntax comprises the flag and that the flag indicates that the at least one of the pictures is not divided into the plurality of sub-regions, an input picture size of the at least one of the pictures to a coded picture size signaled in a sequence parameter set (SPS) of the video data.

~~12~~10. The apparatus for video coding according to claim ~~11~~9, wherein the value of the syntax element indicates a number ~~consecutive ones~~ of the plurality of pictures, slices, and tiles of the video data to be set to the AU.

~~13~~11. The apparatus for video coding according to claim ~~11~~9, wherein the high level~~VPS~~ syntax is contained in a video parameter set (VPS) of the video data and identifying a number of at least one type of enhancement layers of the video data.

~~14~~12. The apparatus for video coding according to claim ~~11~~9, wherein the determining code is further configured to cause the at least one processor to determine whether the high level ~~VPS~~ syntax comprises a flag indicating whether the POC value increases uniformly per AU.

~~15~~13. The apparatus for video coding according to claim ~~14~~12, further comprising:

calculating code configured to cause the at least one processor to calculate, in response to determining that ~~the~~ a video parameter set (VPS) comprises the flag and that the flag indicates that the POC value does not increase uniformly per AU, an access unit count (AUC) from the POC value and a picture level value of the video data.

~~16~~14. The apparatus for video coding according to claim ~~14~~12, further comprising:

calculating code configured to cause the at least one processor to calculate, in response to determining that ~~the~~ a video parameter set (VPS) comprises the flag and that the flag indicates that the POC value does increase uniformly per AU, an access unit count (AUC) from the POC value and a sequence level value of the video data.

~~17. The apparatus for video coding according to claim 11, wherein the determining code is further configured to cause the at least one processor to determine whether the VPS syntax comprises a flag indicating whether at least one of the pictures is divided into a plurality of sub-regions.~~

~~18. The apparatus for video coding according to claim 17, wherein the setting code is further configured to cause the at least one processor to set, in response to determining that the VPS syntax comprises the flag and that the flag indicates that the at least one of the pictures is not divided into the plurality of sub-regions, an input picture size of the at least one of the pictures to a coded picture size signaled in a sequence parameter set (SPS) of the video data.~~

~~19~~15. The apparatus for video coding according to claim ~~17~~9, wherein the determining code is further configured to cause the at least one processor to determine, in response to determining that the high level ~~VPS~~ syntax comprises the flag and that the flag indicates that the at least one of the pictures is divided into the plurality of sub-regions, whether the SPS comprises syntax elements signaling offsets corresponding to a layer of the video data.

~~20~~16. A non-transitory computer readable medium having stored therein ~~storing~~ a program that, when executed by ~~causing~~ a computer, causes the computer to perform the method for video coding according to any one of claims 1 to 8. ~~to execute a process, the process comprising:~~

~~obtaining video data;~~

~~parsing a video parameter set (VPS) syntax of the video data;~~

~~determining whether a value of a syntax element of the VPS syntax indicates a picture order count (POC) value of an access unit (AU) of the video data; and~~

~~setting at least one of a plurality of pictures, slices, and tiles of the video data to the AU based on the value of the syntax element.~~