

CLAIMS

1. A method for processing video data, the method comprising:
receiving a first network abstraction layer (NAL) unit comprising a portion of the video data for a picture, wherein a NAL unit type of the first NAL unit indicates that the picture is a broken link picture; and
based on the NAL unit type of the first NAL unit, detecting that the picture is a broken link picture, wherein:
a broken link picture is a random-access picture not at the beginning of a bitstream and may include leading pictures, and such leading pictures may refer to unavailable reference pictures which may not be correctly decoded; and
the NAL unit type is:
a first distinct NAL unit type indicating that the picture is a broken link picture with leading pictures; or
a second distinct NAL unit type indicating that the picture is a broken link picture without leading pictures.
2. The method of claim 1, wherein the NAL unit type is the first distinct NAL unit type, and the method further comprising:
discarding the leading pictures; and
transmitting the first NAL unit to a video processing device.
3. The method of claim 1, wherein the NAL unit type is the second distinct NAL unit type, and the method further comprising:
transmitting the first NAL unit to a video processing device; or
receiving a second NAL unit, determining a NAL unit type for the second NAL unit, and based on the NAL unit type for the second NAL unit, detecting a broken link picture with leading pictures, wherein the NAL unit type for the second NAL unit is different than the first NAL unit type.

4. The method of claim 1, wherein the method is performed by a video processing entity, and wherein the video processing entity detects the broken link picture without performing entropy decoding of syntax elements of video bitstream data in the NAL unit.
5. The method of claim 1, further comprising:
in response to detecting a broken link picture, activating one or more new parameter sets for coding the video data.
6. The method of claim 5, wherein the one or more new parameter sets comprise one or more of an adaptation parameter set (APS), a sequence parameter set (SPS), and a picture parameter set (PPS).
7. The method of claim 5, wherein an identification (ID) for one of the one or more parameter sets is the same as an active parameter set for a previously decoded picture.
8. The method of claim 1, wherein the method is performed by a video decoder or by a media aware network element (MANE).
9. A method for processing video data, the method comprising:
receiving a network abstraction layer (NAL) unit comprising a portion of the video data for a picture;
determining whether the picture is a broken link picture, wherein:
a broken link picture is a random-access picture not at the beginning of a bitstream and may include leading pictures, and such leading pictures may refer to unavailable reference pictures which may not be correctly decoded; and
in response to determining that the picture is a broken link picture with leading pictures, setting the NAL unit type for the NAL unit to a first distinct NAL unit type indicating a broken link picture with leading pictures;
in response to determining that the picture is a broken link picture without leading pictures, setting the NAL unit type for the NAL unit to a second distinct NAL unit type indicating a broken link picture without leading pictures.

10. A device for processing video data, the device comprising:
 - means for receiving a first network abstraction layer (NAL) unit comprising a portion of the video data for a picture, wherein a NAL unit type of the first NAL unit indicates that the picture is a broken link picture; and
 - means for detecting that the picture is a broken link picture based on the NAL unit type of the first NAL unit, wherein:
 - a broken link picture is a random-access picture not at the beginning of a bitstream and may include leading pictures, and such leading pictures may refer to unavailable reference pictures which may not be correctly decoded; and
 - wherein the NAL unit type is:
 - a first distinct NAL unit type indicating that the picture is a broken link picture with leading pictures; or
 - a second distinct NAL unit type indicating that the picture is a broken link picture without leading pictures.

11. A device for processing video data, the device comprising:
 - means for receiving a network abstraction layer (NAL) unit comprising a portion of the video data for a picture;
 - means for determining whether the picture is a broken link picture; and
 - means for setting a NAL unit type for the NAL unit, wherein:
 - a broken link picture is a random-access picture not at the beginning of a bitstream and may include leading pictures, and such leading pictures may refer to unavailable reference pictures which may not be correctly decoded; and
 - in response to determining that the picture is a broken link picture with leading pictures, the means for setting the NAL unit type for the NAL unit sets the NAL unit type to a first distinct NAL unit type indicating a broken link picture with leading pictures;
 - in response to determining that the picture is a broken link picture without leading pictures, the means for setting the NAL unit type for the NAL unit sets the NAL unit type to a second distinct NAL unit type indicating a broken link picture without leading pictures.

12. A computer-readable storage medium storing instructions that when executed by one or more processors cause the one or more processors to perform the method according to any one of claims 1 to 9.