the scalability information for each NAL unit in a stream, this requires a bit larger amount of processing power, and some parsers may not have this ability.

[0014] In addition to the above, an aggregator NAL unit has been previously proposed in the SVC file format verification model 2 (MPEG document M7586). In this system, the aggregator NAL unit is a container that includes the associated NAL units in its payload. The aggregator NAL unit has a type that is unspecified in the H.264/AVC and SVC specifications and must be ignored in H.264/AVC and SVC decoders. However, when a base layer picture according to the H.264/AVC standard is enclosed within an aggregator NAL unit, it no longer is decodable with an H.264/AVC decoder, nor is it parsable with a H.264/AVC RTP depayloadizer or AVC file format parser.

SUMMARY ~~OF THE INVENTION~~

[0015] Various embodiments~~The present invention~~ provides for an indirect aggregator NAL unit for the SVC file format and RTP payload format. The indirect aggregator NAL unit of the present disclosure~~invention~~ enables easy identification of scalability dependencies within the bitstream, thereby enabling fast and efficient stream manipulation. Furthermore, the indirect aggregator NAL unit of the present disclosure~~invention~~ ensures that the base layer of the streams can still be processed with a H.264/AVC decoder, AVC file format parser, and H.264/AVC RTP payload parser.

[0015a] According to a first aspect, there is provided a method for encapsulating a scalable coded video signal including a base layer of a coded picture being decodable according to a first algorithm and at least one enhancement layer of the coded picture, comprising: collecting at least one network abstraction layer unit of the coded picture to be encapsulated into an aggregate data unit, encapsulating a scalability information network abstraction layer unit and the at least one network abstraction layer unit into the aggregate data unit, wherein the scalability information network abstraction layer unit is associated with one of the at least one network abstraction layer unit; or a number of network abstraction layer units succeeding the scalability information network abstraction layer unit; the scalability information network abstraction layer unit comprising property or characteristics information that is common to all of the associated network abstraction layer units.

[0015b] According to a second aspect, there is provided a computer-readable medium comprising a computer program for encapsulating a scalable coded video signal including a base layer of a coded picture and at least one enhancement layer of the coded picture, the computer program comprising computer code for: collecting at least one network abstraction layer unit on a network abstraction layer of the coded picture to be encapsulated into an aggregate data unit; encapsulating a scalability information network abstraction layer unit and the at least one network abstraction layer unit into the aggregate data unit; associating the scalability information network abstraction layer unit with one of the at least one network abstraction layer unit; or a number of network abstraction layer units succeeding the scalability information network abstraction layer unit, the scalability information network abstraction layer unit comprising property or characteristics information that is common to all of the associated network abstraction layer units.

[0015c] According to a third aspect, there is provided an electronic device, comprising: a processor; and a memory unit communicatively connected to the processor and including a computer program product for encapsulating a scalable coded video signal including a base layer of a coded picture and at least one enhancement layer of the coded picture, comprising: computer code for collecting at least one network abstraction layer unit on a network abstraction layer of the coded picture to be encapsulated into an aggregate data unit; computer code for encapsulating a scalability information network abstraction layer unit and the at least one network abstraction layer unit into the aggregate data unit; computer code for associating the scalability information network abstraction layer unit with one of the at least one network abstraction layer unit; or a number of network abstraction layer units succeeding the scalability information network abstraction layer unit, the scalability information network abstraction layer unit comprising property or characteristics information that is common to all of the associated network abstraction layer units.

[0016] These and other advantages and features of the disclosure~~invention~~, together with the organization and manner of operation thereof, will become apparent from the following detailed description when taken in conjunction with the accompanying drawings, wherein like elements have like numerals throughout the several drawings described below.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] Figure 1 is a schematic representation of the circuitry included in an electronic device that is capable of serving as an encoder or decoder to implement the functionality of the present invention;