ABSTRACT

LAYERED CODING FOR COMPRESSED SOUND OR SOUND FIELD REPRESENTATIONS

The present document relates to a method of layered encoding of a compressed sound representation of a sound or sound field. The compressed sound representation comprises a basic compressed sound representation comprising a plurality of components, basic side information for decoding the basic compressed sound representation to a basic reconstructed sound representation of the sound or sound field, and enhancement side information including parameters for improving the basic reconstructed sound representation. The method comprises sub-dividing the plurality of components into a plurality of groups of components and assigning each of the plurality of groups to a respective one of a plurality of hierarchical layers, the number of groups corresponding to the number of layers, and the plurality of layers including a baselayer and one or more hierarchical enhancement layers, adding the basic side information to the base layer, and determining a plurality of portions of enhancement side information from the enhancement side information and assigning each of the plurality of portions of enhancement side information to a respective one of the plurality of layers, wherein each portion of enhancement side information includes parameters for improving a reconstructed sound representation obtainable from data included in the respective layer and any layers lower than the respective layer. The document further relates to a method of decoding a compressed sound representation of a sound or sound field, wherein the compressed sound representation is encoded in a plurality of hierarchical layers that include a base layer and one or more hierarchical enhancement layers, as well as to an encoder and a decoder for layered coding of a compressed sound representation

Fig. 2