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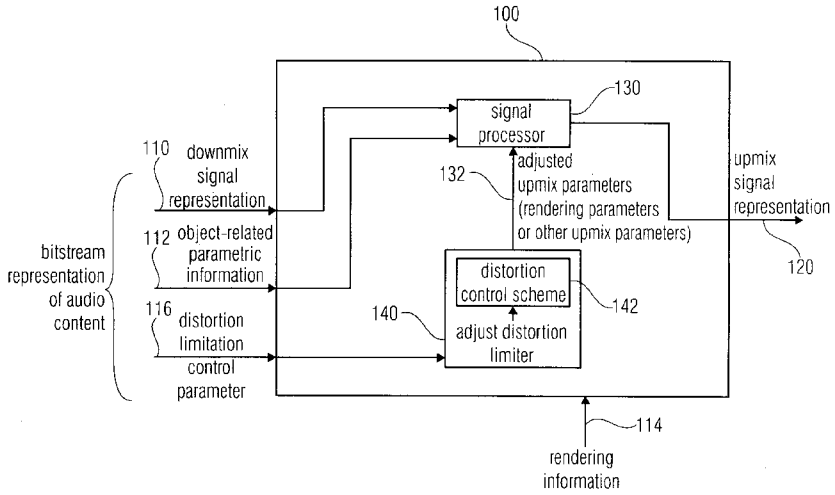
(54) Title: APPARATUS FOR PROVIDING AN UPMIX SIGNAL REPRESENTATION ON THE BASIS OF A DOWNMIX SIGNAL REPRESENTATION, APPARATUS FOR PROVIDING A BITSTREAM REPRESENTING A MULTICHANNEL AUDIO SIGNAL, METHODS, COMPUTER PROGRAM AND BITSTREAM USING A DISTORTION CONTROL SIGNALING



(57) Abstract: An apparatus for providing an upmix signal representation on the basis of a downmix signal representation and an object-related parametric information, which are included in a bitstream representation of an audio content, and in dependence on a rendering information, comprises a distortion limiter configured to adjust upmix parameters using a distortion control scheme to avoid or limit audible distortions which are caused by an inappropriate choice of rendering parameters. The distortion limiter is configured to obtain a distortion limitation control parameter, which is included in the bitstream representation of the audio content, and to adjust a distortion control scheme in dependence on the distortion limitation control parameter.

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