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(54) Title: APPARATUS AND METHOD FOR REALIZING A SAOC DOWNMIX OF 3D AUDIO CONTENT

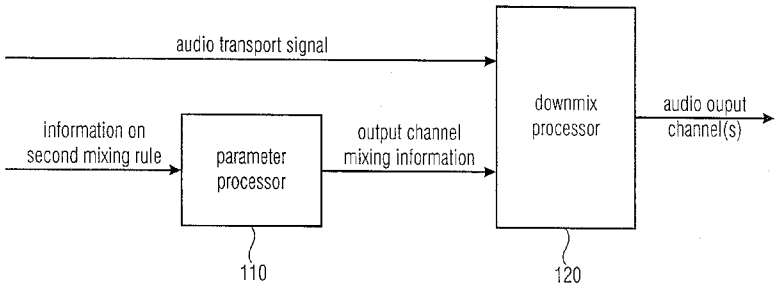

FIGURE 1

(57) Abstract: An apparatus for generating one or more audio output channels is provided. The apparatus comprises a parameter processor (110) for calculating output channel mixing information and a downmix processor (120) for generating the one or more audio output channels. The downmix processor (120) is configured to receive an audio transport signal comprising one or more audio transport channels, wherein two or more audio object signals are mixed within the audio transport signal, and wherein the number of the one or more audio transport channels is smaller than the number of the two or more audio object signals. The audio transport signal depends on a first mixing rule and on a second mixing rule. The first mixing rule indicates how to mix the two or more audio object signals to obtain a plurality of premixed channels. Moreover, the second mixing rule indicates how to mix the plurality of premixed channels to obtain the one or more audio transport channels of the audio transport signal. The parameter processor (110) is configured to receive information on the second mixing rule, wherein the information on the second mixing rule indicates how to mix the plurality of premixed signals such that the one or more audio transport channels are obtained. Moreover, the parameter processor (110) is configured to calculate the output channel mixing information depending on an audio objects number indicating the number of the two or more audio object signals, depending on a premixed channels number indicating the number of the plurality of premixed channels, and depending on the information on the second mixing rule. The downmix processor (120) is configured to generate the one or more audio output channels from the audio transport signal depending on the output channel mixing information.

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