

ABSTRACT

AUDIO DECODER WITH AN ADAPTIVE FREQUENCY DOMAIN DOWNMIXER

A method and apparatus for decoding a multi-channel audio bitstream in which adaptive frequency domain downmixer is used to downmix, according to long and shorter transform block length information, the decoded frequency coefficients of the multi-channel audio such that the long and shorter transform block information is maintained separately within the mixed down left and right channels. In this way, the long and shorter transform block coefficients of the mixed down left and right channels can be inverse transformed adaptively according to the long and shorter transform block information, and the results of the inverse transform of the long and short block of each of the left and right channel added together to form the total mixed_down output of the left and right channel.