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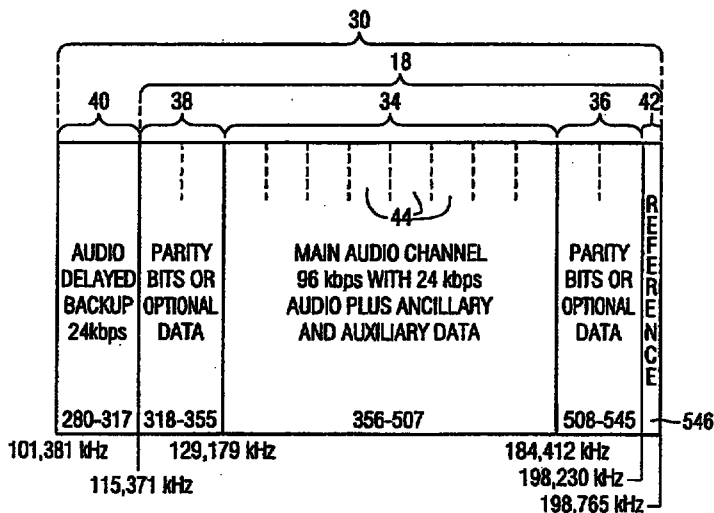
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(54) Title: METHOD AND APPARATUS FOR TRANSMISSION AND RECEPTION OF FM IN-BAND ON-CHANNEL DIGITAL AUDIO BROADCASTING



(57) Abstract: A method for transmission of data in a digital audio broadcasting system includes the steps of providing a plurality of orthogonal frequency division multiplexed sub-carriers, with the sub-carriers including data sub-carriers and reference sub-carriers, and modulating the data sub-carriers with a digital signal representative of information to be transmitted. The reference sub-carriers are modulated with a sequence of timing bits, wherein the sequence of timing bits includes an unambiguous block synchronization word, and the number of bits comprising the block synchronization word is less than one half of the number of bits in said timing sequence. Then the orthogonal frequency division multiplexed sub-carriers are transmitted. Receivers that differentially detect the block synchronization word and use the block synchronization word to coherently detect the digital signal representative of information to be transmitted are also included.

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