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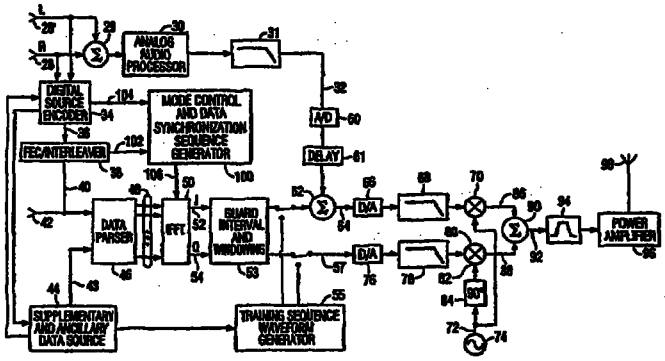
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(54) Title: METHOD AND APPARATUS FOR DETERMINING TRANSMISSION MODE AND SYNCHRONIZATION FOR A DIGITAL AUDIO BROADCASTING SIGNAL



(57) Abstract: A method is provided for transmitting control information in a digital audio broadcasting system. The method comprises the steps of transmitting a plurality of control bits in each of a plurality of control frames, wherein a first sequence of the control bits represents a transmission mode, and a second sequence of the control bits a control data synchronization word. The plurality of control bits can further include a third sequence of bits representative of an interleaver synchronizaton word. A method performed in a radio receiver for determining transmission mode and synchronization for a digital audio broadcasting signal is also provided. The method comprises the steps of receiving a plurality interleaver frames containing digital information, wherein each of the interleaver frames includes a plurality control frames. The control frames include a plurality of control bits, wherein a first sequence of the control bits represents a transmission mode, a second sequence of the control bits a control data synchronization word. The plurality of control bits can further include a third sequence of bits representative of an interleaver synchronization word. The first sequence of control bits is processed to determine a transmission mode; the second sequence of control bits is processed to determine control data synchronization; and the third sequence of control bits is processed to determine interleaver boundaries. Radio frequency transmitters and receivers that utilize the above methods are also disclosed.

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