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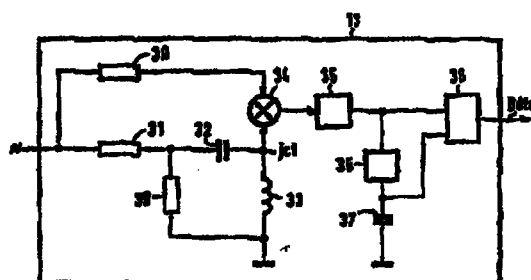
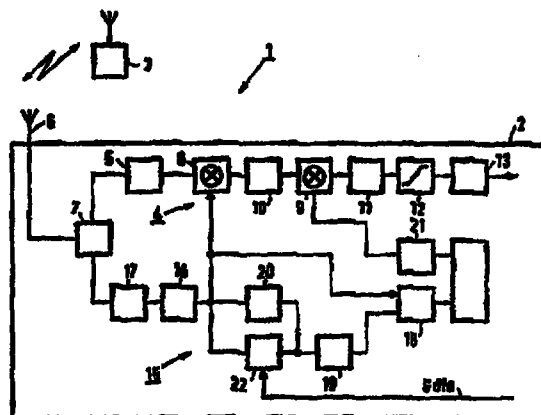
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(54) Title: A DIGITAL RADIO SYSTEM, A DIGITAL RADIO DEVICE, AND A QUADRATURE DEMODULATOR

(57) Abstract

Known is a digital radio system comprising a digital radio device for phase or frequency modulated digital signals with a substantial amplitude roll-off at the relevant operating range. A digital radio device is provided with a quadrature demodulator not having such an amplitude roll-off. This is obtained by a phase shifting network in a quadrature branch of the demodulator having a series arrangement of a resistor and a capacitor coupled to an inductor coupled to ground. A junction between the series arrangement and the inductor forms the output of the quadrature branch. Alternative embodiments are provided. The demodulator avoids asymmetric digital signal distortion which can have deteriorating effects, in particular to GFSK-signals or $\pi/4$ -DQPSK signals, or the like, and further noise shift of data which is of particular importance in low [S/N]-systems such as paging systems.



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