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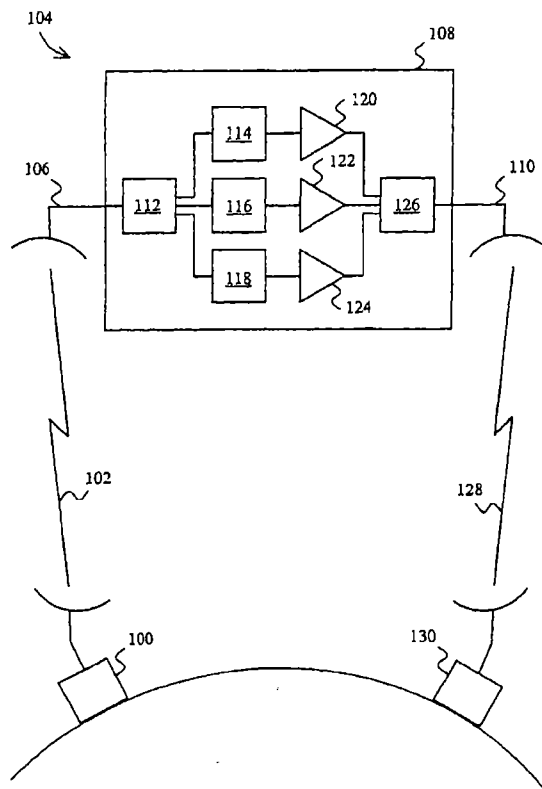
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(54) Title: METHOD AND APPARATUS FOR MONITORING AND CONTROLLING GAIN COMPRESSION IN A TRANSMITTED SIGNAL



(57) Abstract: A method and apparatus for monitoring and controlling the operating point of a satellite transponder amplifier (108). A time domain signal received at a ground station (100) is digitally sampled. A histogram of the received signal is computed and plotted as a graph. Under low compression levels, the histogram generally appears as an approximately bell-shaped curve. Under higher compression levels, the bell-shaped curve becomes distorted. By correlating the acquired histogram to a template histogram, an amount of compression can be determined. This amount of compression indicates the operating point of the transponder amplifiers (108). If desired, the transmission power levels used by the satellite can be adjusted to ensure that the amplifiers operate at desired levels of compression. The invention has an advantage over prior techniques in that the operating point of the transponder amplifiers can be more accurately determined. The operating point can be more precisely adjusted.

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Declarations under Rule 4.17:

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