OUTPUT LEVEL CONTROL CIRCUIT FOR USE IN RF POWER AMPLIFIER

ABSTRACT

An output level control circuit for a high frequency power amplifier (2) for amplifying high frequency signals having the "on" and "off" periods of transmit signals in a fixed recurrent cycle such as in a TDMA radio communication system or a GSM system. The high frequency detecting circuit (8) for the output level control circuit (4) is responsive to part of the output of the high frequency power amplifier (3) and a control signal corresponding to said "on" and "off" periods of transmission power for generating an output level control signal for the high frequency power amplifier (3). The high frequency detecting circuit (8) has detecting means for detecting the wave height of the high frequency signals and differential voltage generating means for generating, for each of said recurrent cycles, a differential voltage between the detection output during the "on" period and the detection output during the "off" period immediately preceding it. This differential voltage is used as the temperature-compensated output level control (7) signal for the high frequency power amplifier (3).

Fig. 1