

Title (en)

CIRCUIT SYSTEM FOR REGULATING THE OPERATING POINT OF A POWER AMPLIFIER

Title (de)

SCHALTUNGSANORDNUNG ZUR REGELUNG DES ARBEITSPUNKTS EINES LEISTUNGSVERSTÄRKERS

Title (fr)

MONTAGE PERMETTANT DE REGLER LE POINT DE FONCTIONNEMENT D'UN AMPLIFICATEUR DE PUISSANCE

Publication

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Application

EP 00960554 A 20000830

Priority

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Abstract (en)

[origin: WO0122573A1] The invention relates to a circuit system for controlling the transistor of a power amplifier. The aim of the invention is to provide a circuit system that has a minimum power consumption while allowing varying output power values. The inventive circuit is especially suitable for amplifiers in mobile telephones. The invention specifically relates to a circuit system that controls at least two different operating points for at least two different output ranges. At a first operating point the bias current in the transistor of the power amplifier is controlled by means of a first current level with a temperature-compensating active feedback circuit. At a second operating point the bias current in the transistor of the power amplifier is controlled by means of a second current level with a second feedback circuit. A third operating range is operated in the saturation mode and guarantees the maximum output efficiency at a maximum output power, the amplification being only partially linear.

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H03F 1/30

IPC 8 full level

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