

Title (en)

PRESERVING LINEARITY OF AN ISOLATOR-FREE POWER AMPLIFIER BY DYNAMICALLY ADJUSTING BIAS AND SUPPLY OF ACTIVE DEVICES

Title (de)

ERHALTUNG DER LINEARITÄT EINES ISOLATORLOSEN LEISTUNGSVERSTÄRKERS DURCH DYNAMISCHE EINSTELLUNG DER VOR- UND DER VERSORGUNGSSPANNUNGEN DER VERSTÄRKENDEN ELEMENTE

Title (fr)

CONSERVATION DE LA LINEARITE D'UN AMPLIFICATEUR DE PUISSANCE SANS ISOLATEUR PAR AJUSTEMENT DYNAMIQUE DE LA POLARISATION DE L'ALIMENTATION DE DISPOSITIFS ACTIFS

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2004054096A1] An amplifier circuit (100) includes a driver stage (120) with at least an active device (140) for pre-amplification and output of a pre-amplified signal; and an output stage (160) with at least an active device (180) for further amplification of the pre-amplified signal and output of an amplified signal. A detector (190) measures levels of forward and reflected parts of the amplified signal, and a control circuit (145) modifies DC levels or offsets of the pre-amplified and/or amplified signals to substantially maintain linearity of the amplifier circuit (100) with load variations. The control circuit (145) further independently and selectively controls and adjusts the DC bias at the input of the active devices (140, 180) of the driver and output stages (120, 160) as a function of the levels of the forward and reflected signals to substantially maintain linearity of the amplifier circuit (100) with load variations.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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