

Title (en)
IN-LINE PREDISTORTER FOR LINEARIZATION OF ELECTRONIC AND OPTICAL SIGNALS

Title (de)
VORVERZERRER ZUR LINEARISIERUNG ELEKTRONISCHER ODER OPTISCHER SIGNALE

Title (fr)
GENERATEUR DE PREDISTORSION EN LIGNE POUR LA LINEARISATION DE SIGNAUX ELECTRONIQUES ET OPTIQUES

Publication
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Application
EP 95921307 A 19950519

Priority
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Abstract (en)
[origin: WO9532561A1] An electronic circuit provides a linear output from a nonlinear transmission device. Second and higher order distortion of the nonlinear device is compensated by applying an equal magnitude predistorted signal with opposite sign to the real and imaginary components of the distortion. The input signal (12), at least one real distortion generating component (16), and in some applications an imaginary distortion generating component (18) are provided to the nonlinear device (20) on an in-line electrical path. An attenuator, an MMIC amplifier, a CATV hybrid amplifier, and a varactor may provide the predistorted signal. The real component of predistortion can be generated by an FET configured as a voltage controlled resistor or by the parallel combination of a diode and resistor connected in series with the signal path. A separate circuit including antiparallel diodes and reactive elements for generating frequency-dependent third order predistortion is provided.

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CPC (source: EP)
H03F 1/3252 (2013.01); **H03F 1/3276** (2013.01); **H04B 10/504** (2013.01); **H04B 10/58** (2013.01)

Citation (search report)
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• See references of WO 9532561A1

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