

Title (en)

RADIO FREQUENCY POWER AMPLIFIER WITH LINEARIZING PREDISTORTER

Title (de)

HOCHFREQUENZ-LEISTUNGSVERSTÄRKER MIT LINEARISIERUNGSVORVERZERRER

Title (fr)

AMPLIFICATEUR DE PUISSANCE RADIOFRÉQUENCE COMPRENANT UN COMPOSANT DE PRÉDISTORSION DE LINÉARISATION

Publication

**EP 2467943 A1 20120627 (EN)**

Application

**EP 09848548 A 20090817**

Priority

US 2009054023 W 20090817

Abstract (en)

[origin: WO2011021995A1] A power amplifier circuit includes an amplifier MOSFET and a predistorter MOSFET. The predistorter MOSFET source and drain are connected together, and the predistorter MOSFET is connected between the gate of the amplifier MOSFET and a second bias voltage signal. This biasing of the predistorter MOSFET causes it to provide a nonlinear capacitance at the gate of the amplifier MOSFET. The combined non-linear capacitances of the amplifier MOSFET and predistorter MOSFET provide predistortion that promotes cancellation of the distortion or nonlinearity contributed by the amplifier MOSFET alone.

IPC 8 full level

**H04B 1/04** (2006.01); **H03F 1/02** (2006.01); **H03F 1/32** (2006.01); **H03F 3/193** (2006.01); **H03F 3/24** (2006.01)

CPC (source: EP KR)

**H03F 1/0261** (2013.01 - EP); **H03F 1/32** (2013.01 - KR); **H03F 1/3205** (2013.01 - EP); **H03F 1/3241** (2013.01 - EP); **H03F 1/3276** (2013.01 - EP); **H03F 3/04** (2013.01 - KR); **H03F 3/082** (2013.01 - KR); **H03F 3/189** (2013.01 - KR); **H03F 3/19** (2013.01 - KR); **H03F 3/193** (2013.01 - EP); **H03F 3/245** (2013.01 - EP); **H04B 1/04** (2013.01 - KR); **H03F 2200/18** (2013.01 - EP); **H03F 2200/408** (2013.01 - EP); **H03F 2200/451** (2013.01 - EP); **H04B 2001/0425** (2013.01 - EP)

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