

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 A4 20131218 (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)

Citation (search report)
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• See references of WO 2011021995A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
WO 2011021995 A1 20110224; CN 102577136 A 20120711; CN 102577136 B 20141105; EP 2467943 A1 20120627; EP 2467943 A4 20131218; HK 1173003 A1 20130503; KR 101719387 B1 20170323; KR 101766628 B1 20170808; KR 101814352 B1 20180104; KR 20120065350 A 20120620; KR 20170032485 A 20170322; KR 20170032486 A 20170322

DOCDB simple family (application)
US 2009054023 W 20090817; CN 200980161984 A 20090817; EP 09848548 A 20090817; HK 13100093 A 20130104; KR 20127006858 A 20090817; KR 20177007015 A 20090817; KR 20177007017 A 20090817