

Title (en)

CAPACITOR-DIODE ALTERNATIVE CIRCUIT

Title (de)

KAPAZIT TSDIODEN-ALTERNATIVSCHALTUNG

Title (fr)

CIRCUIT DE SUBSTITUTION A DIODES A CAPACITE VARIABLE

Publication

EP 1714386 A1 20061025 (DE)

Application

EP 05707830 A 20050124

Priority

- EP 2005050285 W 20050124
- DE 102004004707 A 20040130

Abstract (en)

[origin: WO2005074132A1] A capacitor-diode alternative circuit comprising at least three capacitor diodes, which are serially connected in an alternating manner in an opposite direction, and a resistor and/or inductor network, wherein a) an approximately full amount of control current, which is fed to the circuit, is applied to each of the capacitor diodes in order to adjust capacity, and b) an alternating current voltage which is applied to the series-connected capacitor diodes and which is of a higher frequency than the control current, is divided up between the serially connected capacity diodes, preferably in an at least even manner. One advantage of the inventive capacitor-diode alternative circuit is that the effects of the signal voltage on the adjusted capacity of the capacitor diode alternative circuit are insignificant or at least low, even for a tuning voltage which is lower than or not greater than or not substantially greater than the amplitude of the voltage of the signal which is to be treated in the oscillating circuit. As a result, intermodulation interference is avoided in an effective manner. The circuit can also be used in an electric device wherein only a low operating voltage is provided, e.g. a battery operated device.

IPC 8 full level

H03J 3/18 (2006.01)

CPC (source: EP US)

H03J 3/185 (2013.01 - EP US)

Citation (search report)

See references of WO 2005074132A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 2005074132 A1 20050811; DE 102004004707 A1 20050818; EP 1714386 A1 20061025; US 2007164833 A1 20070719; US 7567120 B2 20090728

DOCDB simple family (application)

EP 2005050285 W 20050124; DE 102004004707 A 20040130; EP 05707830 A 20050124; US 58766205 A 20050124