

Title (en)

LOW PHASE-NOISE INDIRECT FREQUENCY SYNTHESIZER

Title (de)

INDIREKTER FREQUENZSYNTHESIZER MIT NIEDRIGEM PHASENRAUSCHEN

Title (fr)

SYNTHÉTISEUR INDIRECT DE FRÉQUENCES À FAIBLE BRUIT DE PHASE

Publication

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Application

EP 12709134 A 20120320

Priority

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Abstract (en)

[origin: WO2012130668A1] The invention relates to a low phase-noise frequency synthesizer (200), comprising, arranged in series, a first mixer (201) receiving, at the first input thereof, a reference signal (Sr) at a reference frequency Fr, a loop filter (202), and a voltage-controlled oscillator (203) outputting a microwave signal (So) at a second frequency Fo controlled so as to be a multiple of said reference frequency Fr, characterized in that the synthesizer further comprises: a means (204) for multiplying the frequency Fo of said microwave signal (So) by a factor N strictly greater than 1; a means (205, 207, OLk) for correcting the frequency (N.Fo) of the signal output by said multiplication means (204), which is configured to confine said frequency (N.Fo) within an interval [Fomin, Fomax] in which said output frequency Fo would vary if said multiplication factor N were equal to 1; a means (208) for dividing the frequency Fj of the signal output by said correction means (205, 207, OLk) by a factor equal to the expected ratio between said frequency Fj and the reference frequency Fr, said frequency-division means (208) being connected, at the output thereof, to the second input of the first mixer (201).

IPC 8 full level

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CPC (source: EP US)

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DOCDB simple family (publication)

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