

Title (en)  
FREQUENCY GENERATOR

Title (de)  
FREQUENZGENERATOR

Title (fr)  
GENERATEUR DE FREQUENCE

Publication  
**EP 1565990 A1 20050824 (DE)**

Application  
**EP 02781335 A 20021128**

Priority  
EP 0213455 W 20021128

Abstract (en)  
[origin: WO2004049574A1] The invention relates to a frequency generator which comprises a controlled oscillator (16) having a control input and an oscillator output. Said controlled oscillator (16) is adapted to output on the oscillator output an oscillator signal (Sout) having an oscillator frequency that depends on a control signal (SLOC) on the control input. The generator further comprises a scanning device (12) for scanning, by means of a reference frequency, the oscillator signal (Sout) or a signal of the controlled oscillator (16) that is derived from the same in order to obtain a scanned signal (Sd). A low-pass filter (14) is used to low-pass filter the scanned signal (Sd) or a signal derived from the same in order to obtain the control signal (SLOC) or a signal (STP) which is based on the control signal (SLOC). Due to its less complex design, especially the absence of a frequency divider, and the faster adjustability of the actually generated frequency, the inventive frequency generator allows to generate frequencies in an energy-saving manner.

IPC 1-7  
**H03L 7/091**; **H03L 7/20**

IPC 8 full level  
**H03L 7/091** (2006.01); **H03L 7/12** (2006.01); **H03L 7/16** (2006.01); **H03L 7/20** (2006.01); **H04B 1/06** (2006.01); **H04B 1/40** (2006.01); **H04B 7/00** (2006.01)

CPC (source: EP US)  
**H03L 7/091** (2013.01 - EP US); **H03L 7/12** (2013.01 - EP US); **H03L 7/16** (2013.01 - EP US); **H03L 7/20** (2013.01 - EP US)

Citation (examination)

- US 4926140 A 19900515 - SCHENBERG ALAN N [US]
- SANCHO S. ET AL: "Nonlinear Analysis of a Microwave Synthesizer Based on a Sampling-Phase Detector", 2001 IEEE-MTT-S INTERNATIONAL MICROWAVE SYMPOSIUM DIGEST, 20 May 2001 (2001-05-20), PHOENIX, AZ, pages 443 - 446, XP001067314

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)  
**WO 2004049574 A1 20040610**; AU 2002349049 A1 20040618; CA 2507098 A1 20040610; EP 1565990 A1 20050824; JP 2006508572 A 20060309; US 2005277397 A1 20051215

DOCDB simple family (application)  
**EP 0213455 W 20021128**; AU 2002349049 A 20021128; CA 2507098 A 20021128; EP 02781335 A 20021128; JP 2004554259 A 20021128; US 14025905 A 20050527