

ABSTRACT**FREQUENCY GENERATOR FOR RADIOFREQUENCY EQUIPMENT AND METHOD
FOR GENERATING AN OUTPUT SIGNAL**

The invention relates to a frequency generator for radiofrequency equipment for generating an output signal having a predetermined output frequency (F_s), the frequency generator including: a local oscillator (3) to generate a reference signal having a reference frequency (F_{ref}), and a phase-locked loop (5), the phase-locked loop being provided with a controlled oscillator (25) generating the output signal having the output frequency (F_s) as a function of the signal at its input, and a comparator (21) providing a signal to the controlled oscillator (25) as a function of a phase and/or frequency comparison (C) of a first comparison signal (F_{comp1}) based on an input signal applied to a first input (16) of the phase-locked loop (5) with a second comparison signal (F_{comp2}) based on the output signal, the frequency generator (1) further including at least one harmonic generator (7) adapted to generate, from the reference signal, a harmonic signal including a predetermined harmonic (F_H) of the reference signal, the frequency generator being adapted to apply the harmonic signal of one of the harmonic generators to the first input (16) of the phase-locked loop (5). The invention also relates to a method for generating an output signal.

Figure 1