

Title (en)
METHOD AND SYSTEM FOR REAL-TIME MONITORING NOISE SQUEEZING EFFECTS OF A NONLINEAR DEVICE AND/OR SYSTEM

Title (de)
VERFAHREN UND SYSTEM ZUR ECHTZEITÜBERWACHUNG VON RAUSCHAUSDRÜCKENDEN EFFEKTEN EINER NICHTLINEAREN VORRICHTUNG UND/ODER EINES SYSTEMS

Title (fr)
PROCÉDÉ ET SYSTÈME DE SURVEILLANCE EN TEMPS RÉEL DES EFFETS DE COMPRESSION DE BRUIT D'UN DISPOSITIF ET/OU D'UN SYSTÈME NON LINÉAIRE

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Abstract (en)
The present invention relates to a method and system for real-time monitoring noise squeezing effects of a nonlinear device and/or system (1). The method comprises the following steps:- applying a drive signal S_{d} having a drive frequency f_{d} to an input (3) of the nonlinear device and/or system (1) for driving the nonlinear device and/or system (1) in a nonlinear state- applying an additional probe signal S_{p} to the input of the nonlinear device and/or system (1);- capturing an output signal S_{out} of the nonlinear device and/or system (1);- determining, based on the captured output signal S_{out} , a frequency spectrum of the output signal S_{out} ; sub>- determining, based on the frequency spectrum of the output signal S_{out} , an antiresonance frequency f_{ar} , the antiresonance frequency f_{ar} being a measure for the noise squeezing effects of the nonlinear device and/or system (1); wherein:the additional probe signal S_{p} comprises a multi-tone signal having a plurality of different probe frequencies, and/orthe additional probe signal S_{p} comprises white noise having a frequency bandwidth that is smaller than the drive frequency f_{d} .

IPC 8 full level
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CPC (source: EP)
B06B 1/0238 (2013.01); **B06B 1/06** (2013.01)

Citation (applicant)

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