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(54) Method for frequency transposition in a hearing device and such a hearing device

(57) The present invention is related to a method for frequency transposition in a hearing device by transforming an acoustical signal into an electrical signal (s) and by transforming the electrical signal from time domain into frequency domain to obtain a spectrum (S). According the present invention, a frequency transposition is being applied to the spectrum (S) in order to obtain a transposed spectrum (S'), whereby the frequency transposition is being defined by a nonlinear frequency transposition function. Thereby, it is possible to transpose lower frequencies almost linearly, while higher frequencies are transposed more strongly. As a result thereof, harmonic relationships are not distorted in the lower frequency range, and at the same time, higher frequencies can be moved into a lower frequency range, namely in an audible range of the hearing impaired. The transposition scheme can be applied to the complete signal spectrum without the need for switching between non-transposition and transposition processing for different parts of the signal. Therefore, no artifacts due to switching are encountered when applying the present invention.

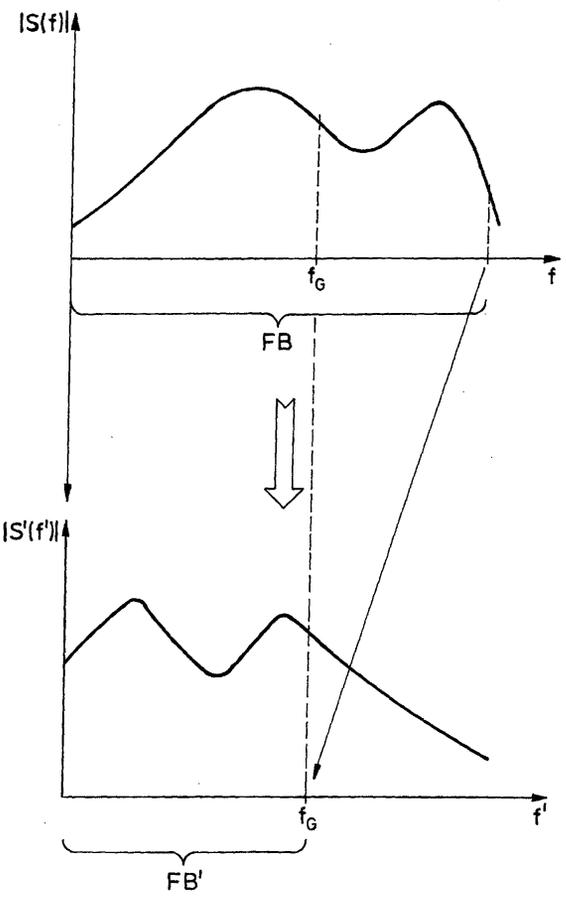

FIG.1

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EUROPEAN SEARCH REPORT

Application Number
EP 03 00 5047

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
MUNICH	22 July 2003	Kunze, H

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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EPO FORM 1503 03.82 (P04C01)

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