

Title (en)

Determination of line spectrum frequencies for use in a radiotelephone

Title (de)

Bestimmung der Linienspektrumfrequenzen zur Verwendung in einem Funkfernsprecher

Title (fr)

Détermination des fréquences du spectre de raies pour utilisation dans un radiotéléphone

Publication

**EP 0774750 A2 19970521 (EN)**

Application

**EP 96308081 A 19961107**

Priority

- US 678795 P 19951115
- US 73582796 A 19961023

Abstract (en)

An audio signal, such as a speech signal, is applied to a LPC filter. A method is disclosed for determining line spectrum frequencies of the LPC filter, expressed by symmetric and antisymmetric auxiliary polynomials, the zeros of which determine the line spectrum frequencies of the LPC filter. The method includes the steps of (a) expressing the auxiliary polynomials using explicit forms of Chebyshev polynomials; (b) iteratively solving a zero of a first of the polynomials using a zero of the other one of the polynomials; and (c) successively eliminating zeroes from the polynomials by polynomial deflation so as to determine the line spectrum frequencies. Also disclosed is a method for determining the immittance spectrum frequencies. <IMAGE>

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IPC 8 full level

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CPC (source: EP)

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Cited by

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