

Title (en)

Time domain noise reduction

Title (de)

Geräuschunterdrückung im Zeitbereich

Title (fr)

Suppression de bruit dans le domaine temporel

Publication

**EP 1143416 B1 20051116 (DE)**

Application

**EP 01440083 A 20010322**

Priority

DE 10017646 A 20000408

Abstract (en)

[origin: US2001028713A1] A process for noise reduction during the transmission of acoustic useful signals includes the following steps: (a) Determining when a speech pause is present; (b) Branching the incoming TC signal from the main signal path and utilizing a Fourier transformation to generate a frequency spectrum; (c) Storing in a buffer memory (3) the last frequency spectrum recorded during the last speech pause; (d) Using an inverse Fourier transformation on the respective last recorded frequency spectrum to generate a simulated noise signal; (e) Subtracting the simulated noise signal in the time domain from the current incoming TC signal. As a result, the original signal is maintained uncorrupted up to the actual noise subtraction. With simple means and less computing effort than before, the process enables an overall acoustic impression to be produced, which is as agreeable as possible to the human ear and which can be matched to individual requirements. Simple optimization to the spectral processing requirements of noise signals can be realized independently of the voice signal processing requirements.

IPC 1-7

**G10L 21/02**

IPC 8 full level

**G10L 21/0208** (2013.01); **G10L 15/20** (2006.01); **H03M 7/30** (2006.01); **G10L 21/0216** (2013.01)

CPC (source: EP US)

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Cited by

FR2988549A1; WO2013140070A1; US9479278B2

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**EP 1143416 A2 20011010**; **EP 1143416 A3 20040421**; **EP 1143416 B1 20051116**; AT E310305 T1 20051215; AU 3336101 A 20011011; CN 1225104 C 20051026; CN 1325222 A 20011205; DE 10017646 A1 20011011; DE 50108051 D1 20051222; HU 0101288 D0 20010628; HU P0101288 A2 20011228; JP 2001350498 A 20011221; US 2001028713 A1 20011011; US 6801889 B2 20041005

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